



# Film Capacitors

## 2022-2023Y Catalogue

Provide Film Capacitors To The World With Excellent Performance

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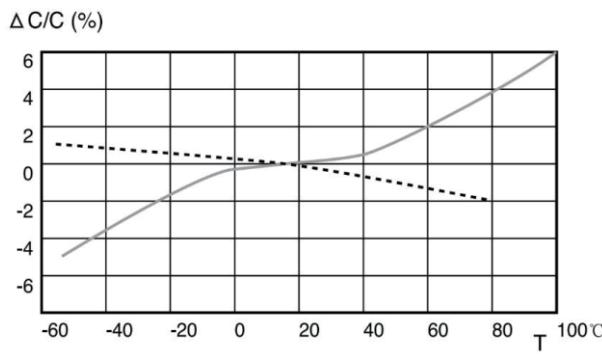
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\*THB: Temperature Humidity Bias

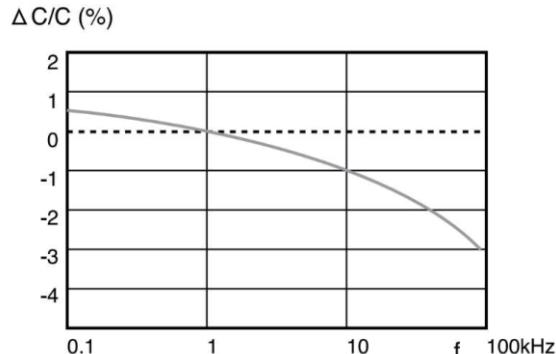
# Typical dielectric features

Compared to polyester, the Polypropylene as a dielectric has the following inherent properties:

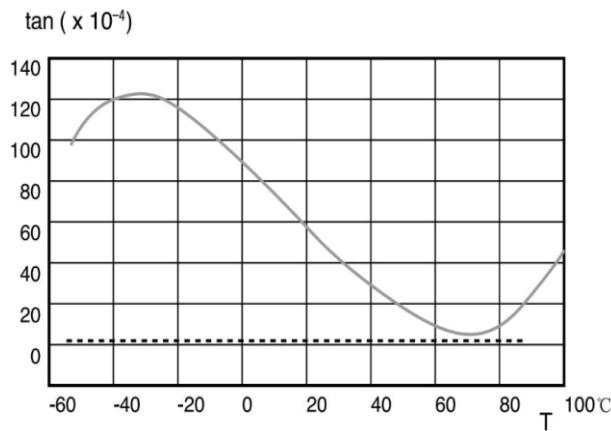
- Very low dissipation factor
- High insulation resistance
- High thermal stability
- Excellent self-healing features



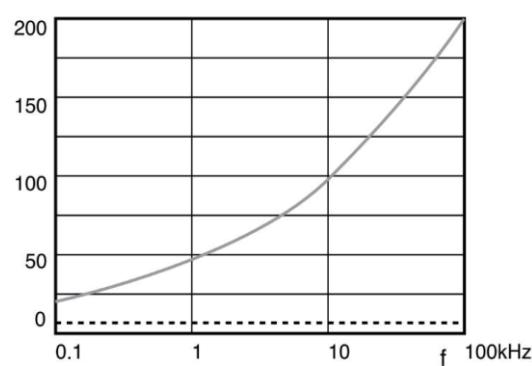
Capacitance Vs. Temperature at 1kHz



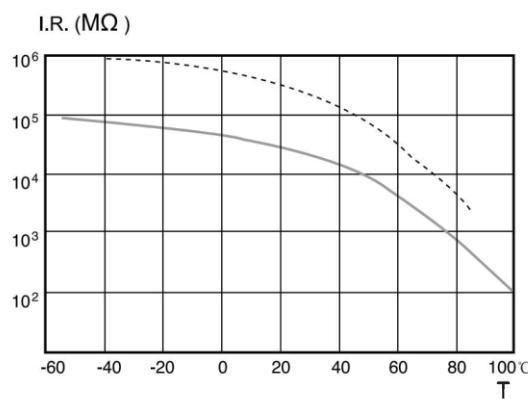
Capacitance Vs. Frequency (Room temperature)



Dissipation Vs. Temperature at 1kHz



Dissipation Vs. Frequency (Room temperature)



I.R. Vs. Temperature

----- Polypropylene Film  
—— Polyester Film

# The standard system of capacitors

The reference standard for our capacitors are shown in below table, please find the corresponding specification.

| Name No.      | Standards   |
|---------------|---|
| IEC 60384-1   | Part 1: Generic specification   |
| IEC 60384-2   | Part 2: Fixed metallized polyethylene-terephthalate film dielectric d.c. capacitors   |
| IEC 60384-13  | Part 13: Sectional specification: Fixed capacitors: Fixed polypropylene film dielectric metal foil d.c. capacitors  |
| IEC 60384-14  | Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains  |
| IEC 60384-16  | Part 16: Sectional specification: Fixed metallized polypropylene film dielectric d.c. capacitors  |
| IEC 60384-17  | Part 17: Sectional specification: Fixed metallized polypropylene film dielectric a.c. and pulse capacitors  |
| IEC 61071     | Capacitors for power electronics  |
| IEC 60831-1   | Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1000V<br>Part 1: General - performance, testing and rating - safety requirements - Guide for installation and operation |
| IEC 60831-2   | Shunt power capacitors of the self-healing type for a.c. systems having a rated voltage up to and including 1000V<br>Part 2: Aging test, self-healing test and destruction test   |
| IEC 61881     | Railway applications - Rolling stock equipment - Capacitors for power electronics   |
| IEC 61373     | Railway applications - Rolling stock equipment - Shock and Vibration tests  |
| AEC-Q200      | Stress test qualification for passive components  |
| IEC 60721-3-1 | Classification of environmental conditions -<br>Part 3 Classification of groups of environmental parameters and their severities-<br>Section 1 Storage  |
| IEC 60721-3-2 | Classification of environmental conditions -<br>Part 3 Classification of groups of environmental parameters and their severities-<br>Section 2 Transportation and handling  |
| IEC 60721-3-3 | Classification of environmental conditions -<br>Part 3 Classification of groups of environmental parameters and their severities-<br>Section 3 Stationary use at weatherprotected locations   |

## Rated Capacitance (C)

Designed capacitance of the capacitor at 20°C / 50 Hz to 120Hz

## Capacitance Tolerance

Admitted capacitance deviation from the rated capacitance.

## Rated Voltage Un

The maximum direct voltage or the maximum r.m.s. alternating voltage (50 Hz) or the peak value of a pulse voltage which may be continuously applied to a capacitor at any temperature between the lower category temperature and the rated temperature.

## RMS Voltage (Urms)

Root mean square of the maximum permissible value of the sinusoidal AC voltage in continuous operation.

## Ripple Voltage (Ur)

Peak to peak alternating component of the unidirectional voltage

## Non-recurrent Surge Voltage (Us)

Surge voltage induced by a switching or any other disturbance of system which is allowed for a limited number of times and for durations shorter than the basic period.

## Maximum Current (Imax)

Maximum rms current for continuous operation.

## Maximum Peak Current (Ipeak)

Maximum permitted repetitive peak current that can occur during continuous operation. The value is following:

$$I_{peak} = C * dv/dt$$

C = Rated Capacitance

dv/dt = The rate of voltage rise, which means maximum permitted repetitive rate of voltage rise of operational voltage.

## Maximum Surge Current (Is)

Peak non-repetitive current induced by a switching or any other disturbance of system which is allowed for a limited number of times and for durations shorter than the basic period.

## Temperature Derated Voltage

The maximum voltage that may be continuously applied to a capacitor for any temperature between the rated temperature and the upper category temperature.

## Operating Temperature Range

The operating temperature of the capacitor is defined as the ambient temperature + self-temperature raise + temperature rise due to thermal radiation from other heat sources.

## Climatic Category

The climatic category which the capacitor belongs to is expressed in numbers (standard IEC 60068-1: For example 40/85/56).

40 = Lower Category Temperature -40 °C

85 = Upper category Temperature +85 °C

56 = the days relevant to the damp heat test 56days

## Temperature Coefficient of Capacitance ( $\alpha$ )

The change rate of capacitance with temperature measured over a specified range of temperature. It is normally expressed in parts per million per Celsius degree ( $10^{-6} /{^\circ}\text{C}$ ) and referred to 20°C

$$\alpha = \frac{C_i - C_0}{C_0(T_i - T_0)}$$

$C_i$  = Capacitance at the temperature  $T_i$

$C_0$  = Capacitance at the temperature  $T_0$  ( $20 \pm 2$ ) °C

## Series Resistance (Rs)

Effective ohmic resistance of the conductors of a capacitor under specified operating conditions. It depends on temperature and the approximate TCR is 0.004/°C.

$$Rs(T_2) = [1 + 0.004 * (T_2 - T_1)] * Rs(T_1)$$

## Equivalent Series Resistance (ESR)

ESR is the ohmic part of an equivalent series circuit. Its value assumes all losses to be represented by a single resistance in series with the idealized capacitor. The ESR comprises the polarization losses of the dielectric material (Rpol), the losses caused by the resistance of the leads, termination and electrodes (Rs) and the insulation resistance (Ris)

$$ESR = \frac{\tan\delta}{\omega * C}$$

## Dielectric Dissipation Factor ( $\tan \delta_d$ )

Constant dissipation factor of the dielectric material for all capacitors at their rated frequency. The typical loss factor of polypropylene film is  $2 \times 10^{-4}$ .

## Loss Factor of The Capacitor ( $\tan \delta$ )

The dissipation factor is ratio between reactive power of the impedance of the capacitor and effective power when capacitor is submitted to a sinusoidal voltage of specified frequency, it is that ratio between the equivalent series resistance and the capacitive reactance of a capacitor.

## Impedance (Z)

The impedance Z is the magnitude of the vectorial sum of ESR and the capacitive reactance XC in an equivalent series circuit under consideration of the series inductance L.

$$Z = \sqrt{ESR^2 + \left( \omega L + \frac{1}{\omega C} \right)^2}$$

The impedance is typically measured on capacitors (radial types) having 2 mm long leads.

## Insulation Resistance ( $R_{is}$ ) and Time Constant ( $\tau$ )

The  $R_{is}$  is the ratio of an applied DC voltage to the resulting leakage current (flowing through the dielectric and over its body surface) after the initial charging current has ceased. The  $R_{is}$  is typically measured after one minute  $\pm 5$  s at 20 °C and a relative humidity of 50 %  $\pm 2\%$ .

$$R_{is} = \frac{U_{DC}}{I_{leak}} (\Omega)$$

The insulation resistance is determined by the property and the quality of the dielectric material and the capacitor's construction. The  $R_{is}$  decreases with increasing temperature. A high relative humidity may decrease the insulation resistance.  $R_{is}$  changes due to moisture are reversible. The  $R_{is}$  is shown as time constant ( $\tau$ ). It is the product of insulation resistance and capacitance and is expressed in seconds

$$\tau = R_{is} * C$$

## Inductance (L)

The inductance of a capacitor depends upon the geometric design of the capacitor element and the length and the thickness of the contacting terminals. All the film capacitors have an extended metallized film or foil construction and exhibit thus a very low inductance. The inductance of radial leaded capacitor types are typically measured with 2 mm long lead wires. Typical values are less than 1.0 nH per mm of lead length.

## Dielectric Power Loss (Pd)

Loss power induced by dielectric polarization or dielectric conductance. The value is following:

$$P_d = U^2 \times \pi \times f_0 \times C \times \tan \delta_d$$

for DC capacitor:  $U = Ur/2$

for AC capacitor:  $U = \sqrt{2} Urms$

for GTO snubber capacitors:  $U = Undc/2$

$f_0$  : fundamental frequency

C: capacitance

## Joule Power Loss (Pj)

Loss power induced by series resistance of the capacitor under rms current, the value is following:

$$P_j = I^2rms \times R_s$$

## Capacitor Loss (Pt)

Active power dissipated in the capacitor, consist of dielectric loss and joule loss.

$$P_t = P_d + P_j$$

## Resonance Frequency ( $f_r$ )

Lowest frequency at which the impedance of the capacitor becomes minimum. The value is following:

$$f_r = 1/(2\pi \times \sqrt{Ls \times Cn})$$

## Maximum Operating Temperature ( $\theta_{max}$ )

The highest temperature of the case at which the capacitor may be operated.

## Minimum Operating Temperature ( $\theta_{min}$ )

The lowest temperature of the case at which the capacitor may be energized.

## Cooling-air Temperature ( $\theta_{amb}$ )

Temperature of the air measured at the hottest position of the capacitor, under steady-state conditions, midway between two units. If only one unit is involved, it is the temperature of surrounding air, measured 10 cm away and at 2/3 of the case height of the capacitor under steady-state conditions.

## Contained Temperature Rise ( $\Delta \theta_{case}$ )

Difference between the temperature of the hottest point of the container and the temperature of the cooling air.

## Thermal Resistance ( $R_{th}$ )

The thermal resistance indicates by how many degrees the capacitor temperature at the hotspot rises above the ambient temperature per watt of the heat dissipation losses.

## Hotspot Temperature ( $\theta_{hs}$ )

Temperature at the hottest spot inside the capacitor. the value is following:

$$\theta_{hs} = \theta_{amb} + P_t \times R_{th}$$

## Failure rate ( $\lambda$ )

It indicates the failure probability of components in unit time and the value is the number of failure components in unit time compared to total number of components, the unit of  $\lambda$  is FIT (also expressed as Fit or fit) and 1 Fit = 1/ (10<sup>9</sup>hrs)

For example: 10 000 pcs of components work at given condition for 10000 hrs and 10 pcs of components failed, so  $\lambda = 10/(10 000 \times 10 000) = 100$  Fit

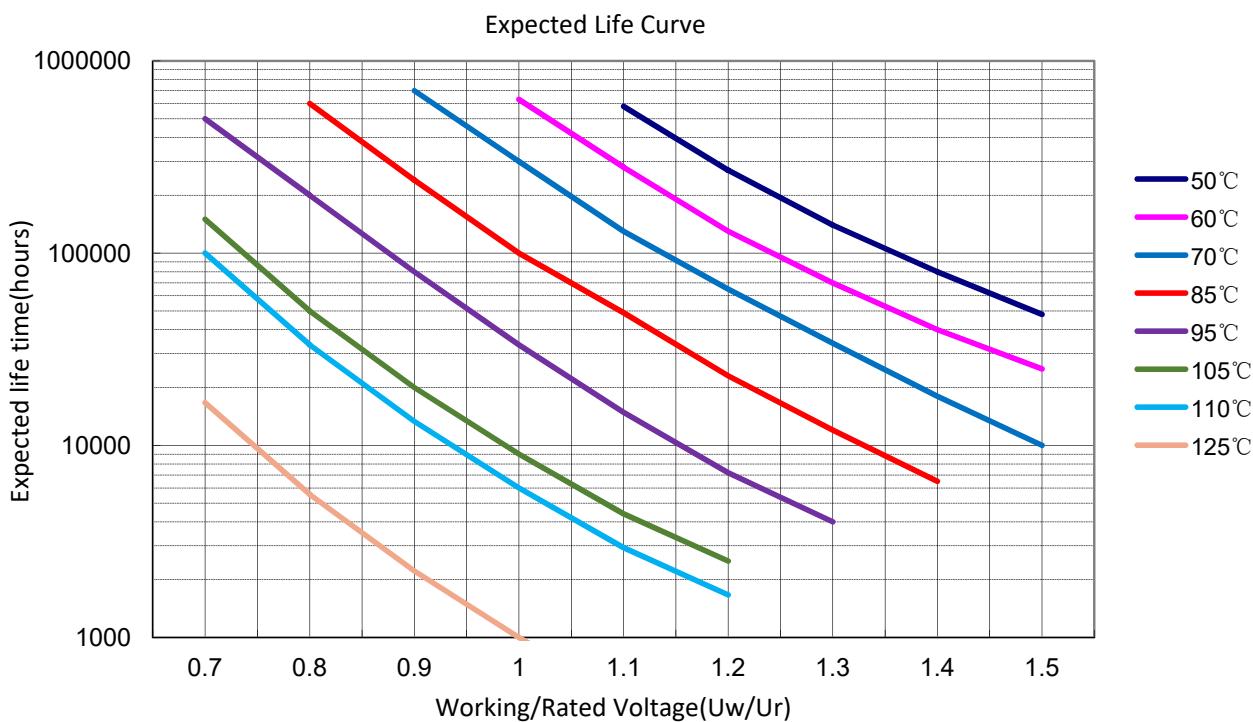
## Self-Healing

Self-healing, also known as clearing is the removal of a defect caused by pinholes, film flaws or external voltage transients. The heat generated by the arcing during a breakdown, evaporates the extremely thin metallization of the film around the point of failure, thereby removing and isolating the short circuit conditions. On Segmented Film Technology Capacitors, the self-healing effect is more controlled. The film metallization is made by forming a pattern of segments, which are connected to each other by micro fuses. This limits the healing current and limits the self-healing effect to a well-defined section of the film.

## Expected Lifetime of Capacitor

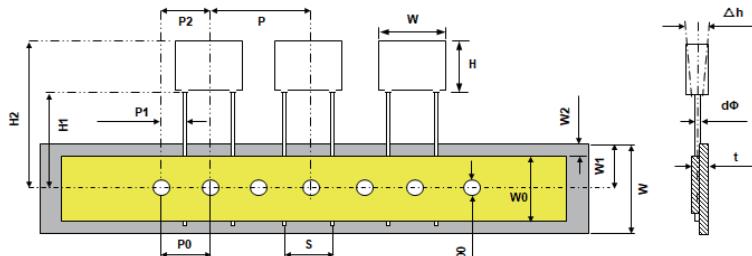
The expected life time of capacitor depend on the applied voltage and the hot spot temperature during the operation. For capacitors applied in different situation, the designed average service life is different.

In the capacitor industry, capacitors used in DC-Link circuits will have an expected lifetime of probable 100,000 Hrs at rated voltage and 70 °C hot spot temperature. Expected lifetime is a statistical value calculated on the basis of experience and on theoretical evaluations. The following diagrams show the correlation between expected life, operating voltage and hot spot temperature. The diagram should be considered only as a reference. Please contact our technical department if you have any further question.



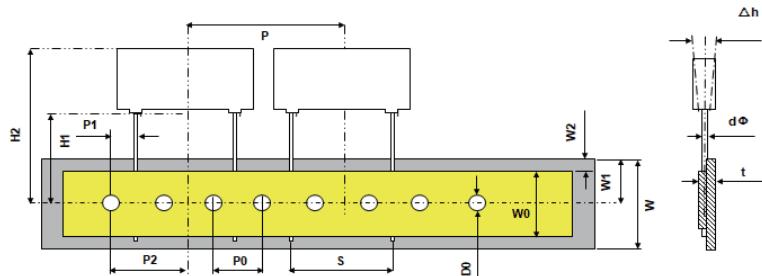
## Taping Style: Straight leads

Lead spacing: 10 - 15mm



Quantity: 10pcs / line

Lead spacing: 22.5mm



Quantity: 6pcs / line

## Taping Specification

| Description                          | Symbol | Dimension (mm) |      |      |      | Tolerance |
|--------------------------------------|--------|----------------|------|------|------|-----------|
| Lead Spacing                         | S      | 10.0           | 12.5 | 15.0 | 22.5 | +0.8/-0.2 |
| Taping Pitch                         | P      | 25.4           | 25.4 | 25.4 | 38.0 | ±1.0      |
| Feed Hole Pitch                      | P0     | 12.7           | 12.7 | 12.7 | 12.7 | ±0.2      |
| Centering of Lead Wire               | P1     | 7.7            | 6.5  | 5.2  | 7.80 | ±0.7      |
| Centering of Body                    | P2     | 12.7           | 12.7 | 12.7 | 19.1 | ±1.3      |
| Carrier Tape Width                   | W      | 18.0           | 18.0 | 18.0 | 18.0 | ±0.5      |
| Hold Down Tape Width                 | W0     | 9.5            | 9.5  | 9.5  | 9.5  | minimum   |
| Hole Position                        | W1     | 9.0            | 9.0  | 9.0  | 9.0  | ±0.5      |
| Hold Down Tape Position              | W2     | 3.0            | 3.0  | 3.0  | 3.0  | maximum   |
| Feed Hole Diameter                   | D0     | 4.0            | 4.0  | 4.0  | 4.0  | ±0.2      |
| Height of Component From Tape Center | H1     | 20.0           | 20.0 | 20.0 | 20.0 | ±0.5      |
| Top Edge of Component                | H2     | 39.0           | 39.0 | 39.0 | 44.0 | maximum   |
| Lead Wire Diameter                   | d      | 0.6            | 0.8  | 0.8  | 0.8  | ±0.1      |
| Component Alignment                  | Δh     | 0.0            | 0.0  | 0.0  | 0.0  | ±2.0      |
| Tape Thickness                       | t      | 0.7            | 0.7  | 0.7  | 0.7  | ±0.2      |

## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Overview

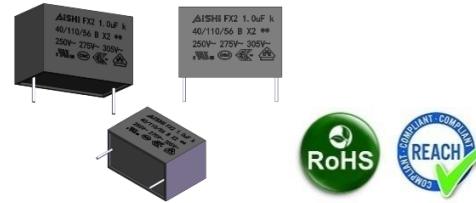
The FX2 series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0.

## Applications

Interference suppression, across-the-line capacitor, EMI filter and spark-killer in class X2 applications. Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.

## Features

- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin



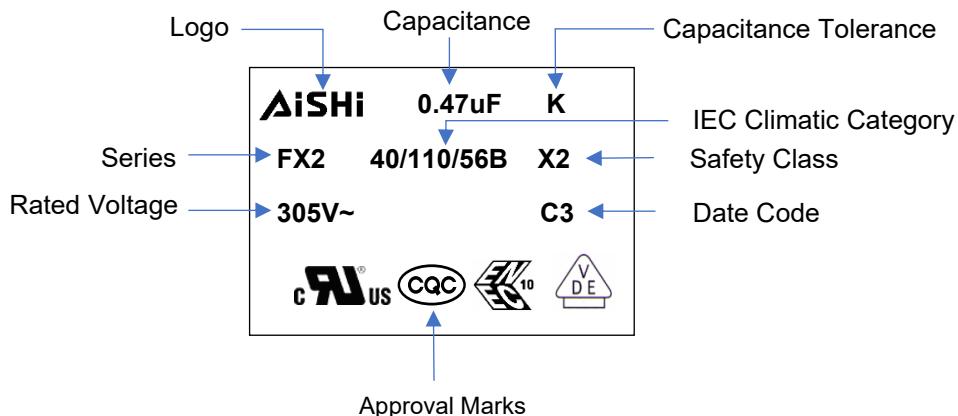
## Applicable Standard

| Approval | Standard   | File Number   |
|----------|--|---|
|          | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538 (305Vac~760Vac)   |
|          | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40051583 (305Vac)<br>40052137 (350Vac~760Vac)   |
|          | IEC 60384-14<br>GB/T6346.14-2015                 | CQC20001245437 (305Vac)<br>CQC20001281016 (350Vac~480Vac)<br>CQC20001281018 (530Vac~760Vac) |

## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 305Vac / 350Vac  |
| Capacitance Range           | 0.01μF to 20.0μF   |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |
| Climatic Category           | 40/110/56 IEC60068-1   |
| Dissipation Factor          | 0.0010 (20°C, 1KHz)  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 μF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 μF at 100 V; 1 min > 5000 MΩ*μF |

## Marking



## Manufacturing Date Code

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|------|------|-------|------|
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| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Part Number System

| F              | X2                                 | 30                     | K                    | 474   | E43                      | 2EL                          | 5                          |
|----------------|------------------------------------|------------------------|----------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series                             | Voltage (VAC)          | Tolerance            | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | Class X2,<br>Metallized<br>PP Film | 30=305Vac<br>35=350Vac | K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

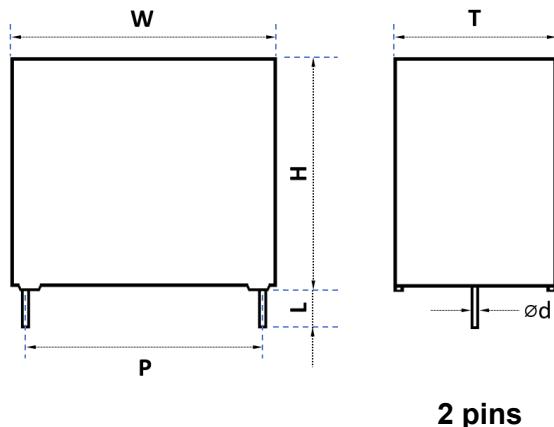
## Terminal Code

| Digit One<br>(Lead/Terminal Type) | Digit Two<br>(Lead Space) |        | Digit Three<br>(Lead Ipsilateral) |        |   |
|-----------------------------------|---------------------------|--------|-----------------------------------|--------|---|
| 2 leads for long                  | L                         | 10.0mm | C                                 | 5.1mm  | A |
| 2 leads for straight cut          | 2                         | 15.0mm | E                                 | 7.5mm  | C |
| 2 leads for forming cut           | E                         | 22.5mm | F                                 | 10.2mm | B |
| 4 leads for straight cut          | 4                         | 27.5mm | G                                 | 12.7mm | G |
| Taping                            | T                         | 37.5mm | K                                 | 20.3mm | D |
| Taping Straight                   | V                         | 52.5mm | M                                 | N/A    | L |
|                                   |                           | N/A    | N                                 |        |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |
|             |   |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | Ød        | Tolerance |
| C13       | 13        | 0.5       | 11   | 0.5       | 5    | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C16       | 13        | 0.5       | 12   | 0.5       | 6    | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C26       | 13        | 0.5       | 14   | 0.5       | 8    | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C27       | 13        | 0.5       | 16   | 0.5       | 8    | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C30       | 13        | 0.5       | 16   | 0.5       | 9    | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| E14       | 18        | 0.5       | 11   | 0.5       | 5    | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E17       | 18        | 0.5       | 12   | 0.5       | 6    | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E18       | 18        | 0.5       | 13.5 | 0.5       | 6    | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E29       | 18        | 0.5       | 13.5 | 0.5       | 7.5  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E34       | 18        | 0.5       | 14.5 | 0.5       | 8.5  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E43       | 18        | 0.5       | 16   | 0.5       | 10   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E47       | 18        | 0.5       | 19   | 0.5       | 11   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| F17       | 26        | 0.5       | 16.5 | 0.5       | 7    | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F20       | 26        | 0.5       | 17   | 0.5       | 8.5  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F24       | 26        | 0.5       | 19   | 0.5       | 10   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F26       | 26        | 0.5       | 20   | 0.5       | 11   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F27       | 26        | 0.5       | 22   | 0.5       | 12   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F29       | 26        | 0.5       | 23   | 0.5       | 13   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F34       | 26        | 0.5       | 29.5 | 0.5       | 14.5 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F36       | 26        | 0.5       | 25   | 0.5       | 15   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| G15       | 32        | 0.8       | 18   | 0.8       | 9    | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G22       | 32        | 0.8       | 24.5 | 0.8       | 13   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G25       | 32        | 0.8       | 24   | 0.8       | 14   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G33       | 32        | 0.8       | 28   | 0.8       | 18   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K27       | 42        | 1.0       | 37   | 1.0       | 22   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K32       | 42        | 1.0       | 44   | 1.0       | 24   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K42       | 42        | 1.0       | 45   | 1.0       | 30   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| M16       | 57.5      | 1.0       | 45   | 1.0       | 30   | 1.0       | 52.5  | 0.5       | 1.2       | 0.05      |

**Rating and Part Number**

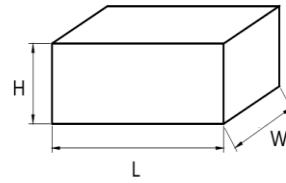
| Vac | Vdc | Cap Value | Dimensions |      |      |      | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|------|------|------|--------------|---------------|-------|-----------|------------------|
|     |     |           | W          | H    | T    | P    |              |               |       |           |                  |
|     |     | µF        | mm         | mm   | mm   | mm   | A            | A             | V/us  | mm        |                  |
| 305 | 630 | 0.01      | 13         | 11   | 5    | 10   | 5            | 15            | 500   | 0.6       | FX230K103C132CL5 |
| 305 | 630 | 0.022     | 13         | 11   | 5    | 10   | 11           | 33            | 500   | 0.6       | FX230K223C132CL5 |
| 305 | 630 | 0.033     | 13         | 11   | 5    | 10   | 16.5         | 49.5          | 500   | 0.6       | FX230K333C132CL5 |
| 305 | 630 | 0.047     | 13         | 11   | 5    | 10   | 23.5         | 70.5          | 500   | 0.6       | FX230K473C132CL5 |
| 305 | 630 | 0.068     | 13         | 11   | 5    | 10   | 34           | 102           | 500   | 0.6       | FX230K683C132CL5 |
| 305 | 630 | 0.082     | 13         | 12   | 6    | 10   | 41           | 123           | 500   | 0.6       | FX230K823C162CL5 |
| 305 | 630 | 0.1       | 13         | 12   | 6    | 10   | 50           | 150           | 500   | 0.6       | FX230K104C162CL5 |
| 305 | 630 | 0.15      | 13         | 14   | 8    | 10   | 75           | 225           | 500   | 0.6       | FX230K154C262CL5 |
| 305 | 630 | 0.22      | 13         | 14   | 8    | 10   | 110          | 330           | 500   | 0.6       | FX230K224C262CL5 |
| 305 | 630 | 0.27      | 13         | 16   | 8    | 10   | 135          | 405           | 500   | 0.6       | FX230K274C272CL5 |
| 305 | 630 | 0.33      | 13         | 16   | 9    | 10   | 165          | 495           | 500   | 0.6       | FX230K334C302CL5 |
| 305 | 630 | 0.047     | 18         | 11   | 5    | 15   | 18.8         | 56.4          | 400   | 0.6       | FX230K473E142EL5 |
| 305 | 630 | 0.068     | 18         | 11   | 5    | 15   | 27.2         | 81.6          | 400   | 0.6       | FX230K683E142EL5 |
| 305 | 630 | 0.082     | 18         | 11   | 5    | 15   | 32.8         | 98.4          | 400   | 0.6       | FX230K823E142EL5 |
| 305 | 630 | 0.1       | 18         | 11   | 5    | 15   | 40           | 120           | 400   | 0.6       | FX230K104E142EL5 |
| 305 | 630 | 0.15      | 18         | 12   | 6    | 15   | 60           | 180           | 400   | 0.6       | FX230K154E172EL5 |
| 305 | 630 | 0.22      | 18         | 13.5 | 7.5  | 15   | 88           | 264           | 400   | 0.8       | FX230K224E292EL5 |
| 305 | 630 | 0.27      | 18         | 14.5 | 8.5  | 15   | 108          | 324           | 400   | 0.8       | FX230K274E342EL5 |
| 305 | 630 | 0.33      | 18         | 14.5 | 8.5  | 15   | 132          | 396           | 400   | 0.8       | FX230K334E342EL5 |
| 305 | 630 | 0.47      | 18         | 16   | 10   | 15   | 188          | 564           | 400   | 0.8       | FX230K474E432EL5 |
| 305 | 630 | 0.56      | 18         | 19   | 11   | 15   | 224          | 672           | 400   | 0.8       | FX230K564E472EL5 |
| 305 | 630 | 0.68      | 18         | 19   | 11   | 15   | 272          | 816           | 400   | 0.8       | FX230K684E472EL5 |
| 305 | 630 | 0.33      | 26         | 16.5 | 7    | 22.5 | 66           | 198           | 200   | 0.8       | FX230K334F172FL5 |
| 305 | 630 | 0.47      | 26         | 16.5 | 7    | 22.5 | 94           | 282           | 200   | 0.8       | FX230K474F172FL5 |
| 305 | 630 | 0.56      | 26         | 19   | 10   | 22.5 | 112          | 336           | 200   | 0.8       | FX230K564F242FL5 |
| 305 | 630 | 0.68      | 26         | 19   | 10   | 22.5 | 136          | 408           | 200   | 0.8       | FX230K684F242FL5 |
| 305 | 630 | 1         | 26         | 20   | 11   | 22.5 | 200          | 600           | 200   | 0.8       | FX230K105F262FL5 |
| 305 | 630 | 1.2       | 26         | 22   | 12   | 22.5 | 240          | 720           | 200   | 0.8       | FX230K125F272FL5 |
| 305 | 630 | 1.5       | 26         | 23   | 13   | 22.5 | 300          | 900           | 200   | 0.8       | FX230K155F292FL5 |
| 305 | 630 | 1.8       | 26         | 29.5 | 14.5 | 22.5 | 360          | 1080          | 200   | 0.8       | FX230K185F342FL5 |
| 305 | 630 | 2         | 26         | 29.5 | 14.5 | 22.5 | 400          | 1200          | 200   | 0.8       | FX230K205F342FL5 |
| 305 | 630 | 2.2       | 26         | 29.5 | 14.5 | 22.5 | 440          | 1320          | 200   | 0.8       | FX230M225F342FL5 |
| 305 | 630 | 0.68      | 32         | 18   | 9    | 27.5 | 102          | 306           | 150   | 0.8       | FX230K684G152GL5 |
| 305 | 630 | 0.82      | 32         | 18   | 9    | 27.5 | 123          | 369           | 150   | 0.8       | FX230K824G152GL5 |
| 305 | 630 | 1         | 32         | 20   | 11   | 27.5 | 150          | 450           | 150   | 0.8       | FX230K105G182GL5 |
| 305 | 630 | 1.2       | 32         | 20   | 11   | 27.5 | 180          | 540           | 150   | 0.8       | FX230M125G182GL5 |
| 305 | 630 | 1.5       | 32         | 24.5 | 13   | 27.5 | 225          | 675           | 150   | 0.8       | FX230K155G222GL5 |
| 305 | 630 | 1.8       | 32         | 24.5 | 13   | 27.5 | 270          | 810           | 150   | 0.8       | FX230K185G222GL5 |
| 305 | 630 | 2.2       | 32         | 24   | 14   | 27.5 | 330          | 990           | 150   | 0.8       | FX230K225G252GL5 |
| 305 | 630 | 2.7       | 32         | 28   | 18   | 27.5 | 405          | 1215          | 150   | 0.8       | FX230K275G332GL5 |
| 305 | 630 | 3.3       | 32         | 28   | 18   | 27.5 | 495          | 1485          | 150   | 0.8       | FX230M335G332GL5 |
| 305 | 630 | 3.3       | 32         | 33   | 18   | 27.5 | 495          | 1485          | 150   | 0.8       | FX230K335G342GL5 |
| 305 | 630 | 3.9       | 32         | 33   | 18   | 27.5 | 585          | 1755          | 150   | 0.8       | FX230K395G342GL5 |
| 305 | 630 | 4.7       | 32         | 33   | 18   | 27.5 | 705          | 2115          | 150   | 0.8       | FX230M475G342GL5 |
| 305 | 630 | 4.7       | 32         | 37   | 22   | 27.5 | 705          | 2115          | 150   | 0.8       | FX230K475G402GL5 |
| 305 | 630 | 5.6       | 32         | 37   | 22   | 27.5 | 840          | 2520          | 150   | 0.8       | FX230M565G402GL5 |
| 305 | 630 | 4.7       | 42         | 32   | 19   | 37.5 | 470          | 1410          | 100   | 1.0       | FX230K475K212KL5 |
| 305 | 630 | 6.8       | 42         | 37   | 22   | 37.5 | 680          | 2040          | 100   | 1.0       | FX230K685K272KL5 |
| 305 | 630 | 10        | 42         | 45   | 30   | 37.5 | 1000         | 3000          | 100   | 1.0       | FX230K106K422KL5 |
| 305 | 630 | 12        | 42         | 45   | 30   | 37.5 | 1200         | 3600          | 100   | 1.0       | FX230K126K422KL5 |
| 305 | 630 | 15        | 42         | 45   | 30   | 37.5 | 1500         | 4500          | 100   | 1.0       | FX230K156K422KL5 |
| 305 | 630 | 18        | 57.5       | 45   | 30   | 52.5 | 1440         | 4500          | 80    | 1.2       | FX230K186M162ML5 |
| 305 | 630 | 20        | 57.5       | 45   | 30   | 52.5 | 1600         | 4800          | 80    | 1.2       | FX230K206M162ML5 |

**Rating and Part Number**

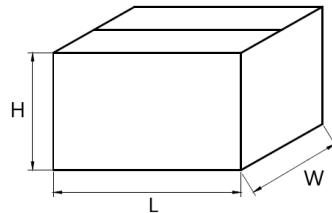
| Vac | Vdc | Cap Value | Dimensions |      |      |      | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|------|------|------|--------------|---------------|-------|-----------|------------------|
|     |     |           | W          | H    | T    | P    |              |               |       |           |                  |
| μF  | mm  | mm        | mm         | mm   | mm   | mm   | A            | A             | V/us  | mm        |                  |
| 350 | 700 | 0.1       | 18         | 13.5 | 6    | 15   | 50           | 150           | 500   | 0.6       | FX235K104E182EL5 |
| 350 | 700 | 0.15      | 18         | 13.5 | 7.5  | 15   | 75           | 225           | 500   | 0.8       | FX235K154E292EL5 |
| 350 | 700 | 0.22      | 18         | 14.5 | 8.5  | 15   | 110          | 330           | 500   | 0.8       | FX235K224E342EL5 |
| 350 | 700 | 0.33      | 18         | 16   | 10   | 15   | 165          | 495           | 500   | 0.8       | FX235K334E432EL5 |
| 350 | 700 | 0.47      | 18         | 19   | 11   | 15   | 235          | 705           | 500   | 0.8       | FX235M474E472EL5 |
| 350 | 700 | 0.47      | 26         | 17   | 8.5  | 22.5 | 188          | 564           | 400   | 0.8       | FX235K474F202FL5 |
| 350 | 700 | 0.56      | 26         | 19   | 10   | 22.5 | 224          | 672           | 400   | 0.8       | FX235K564F242FL5 |
| 350 | 700 | 0.68      | 26         | 20   | 11   | 22.5 | 272          | 816           | 400   | 0.8       | FX235K684F262FL5 |
| 350 | 700 | 0.82      | 26         | 22   | 12   | 22.5 | 328          | 984           | 400   | 0.8       | FX235K824F272FL5 |
| 350 | 700 | 1         | 26         | 23   | 13   | 22.5 | 400          | 1200          | 400   | 0.8       | FX235K105F292FL5 |
| 350 | 700 | 1.2       | 26         | 25   | 15   | 22.5 | 480          | 1440          | 400   | 0.8       | FX235K125F362FL5 |
| 350 | 700 | 1.5       | 26         | 29.5 | 14.5 | 22.5 | 600          | 1800          | 400   | 0.8       | FX235K155F342FL5 |
| 350 | 700 | 1.8       | 32         | 28   | 14   | 22.5 | 360          | 1080          | 200   | 0.8       | FX235K185G262GL5 |
| 350 | 700 | 2.0       | 32         | 28   | 14   | 27.5 | 400          | 1200          | 200   | 0.8       | FX235M205G262GL5 |
| 350 | 700 | 2.2       | 32         | 28   | 18   | 27.5 | 440          | 1320          | 200   | 0.8       | FX235K225G332GL5 |
| 350 | 700 | 2.7       | 32         | 28   | 18   | 27.5 | 540          | 1620          | 200   | 0.8       | FX235M275G332GL5 |
| 350 | 700 | 3.0       | 32         | 33   | 18   | 27.5 | 600          | 1800          | 200   | 0.8       | FX235K305G342GL5 |
| 350 | 700 | 3.3       | 32         | 33   | 18   | 27.5 | 660          | 1980          | 200   | 0.8       | FX235M335G342GL5 |
| 350 | 700 | 3.9       | 32         | 37   | 22   | 27.5 | 780          | 2340          | 200   | 0.8       | FX235K395G402GL5 |
| 350 | 700 | 4.7       | 32         | 37   | 22   | 27.5 | 940          | 2820          | 200   | 0.8       | FX235M475G402GL5 |
| 350 | 700 | 4.7       | 42         | 32   | 19   | 37.5 | 470          | 1410          | 100   | 1.0       | FX235K475K212KL5 |
| 350 | 700 | 5.6       | 42         | 37   | 22   | 37.5 | 560          | 1680          | 100   | 1.0       | FX235K565K272KL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |      | Packaging Quantity |             |           |
|-------|-----------|-----------|------|------|--------------------|-------------|-----------|
|       |           | W         | H    | T    | Long Leads         | Short Leads | Ammo Pack |
| 10    | C13       | 13        | 11   | 5    | 1,200              | 1,488       | 680       |
|       | C16       | 13        | 12   | 6    | 1,200              | 1,224       | 560       |
|       | C26       | 13        | 14   | 8    | 1,200              | 912         | 410       |
|       | C27       | 13        | 16   | 8    | 1,200              | 912         | 410       |
|       | C30       | 13        | 16   | 9    | 1,200              | 816         | 370       |
| 15    | E14       | 18        | 11   | 5    | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6    | 800                | 867         | 560       |
|       | E18       | 18        | 13.5 | 6    | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5  | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5  | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10   | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11   | 600                | 476         | 300       |
| 22.5  | F17       | 26        | 16.5 | 7    | 528                | 528         | 300       |
|       | F20       | 26        | 17   | 8.5  | 432                | 432         | 250       |
|       | F24       | 26        | 19   | 10   | 372                | 372         | 210       |
|       | F26       | 26        | 20   | 11   | 336                | 336         | 190       |
|       | F27       | 26        | 22   | 12   | 300                | 300         | 170       |
|       | F29       | 26        | 23   | 13   | 276                | 276         | 160       |
|       | F34       | 26        | 29.5 | 14.5 | 252                | 252         | 140       |
|       | F36       | 26        | 25   | 15   | 240                | 240         | 140       |
| 27.5  | G15       | 32        | 18   | 9    | 340                | 340         |           |
|       | G18       | 32        | 20   | 11   | 280                | 280         |           |
|       | G22       | 32        | 24.5 | 13   | 230                | 230         |           |
|       | G25       | 32        | 24   | 14   | 220                | 220         |           |
|       | G26       | 32        | 28   | 14   | 220                | 220         |           |
|       | G33       | 32        | 28   | 18   | 170                | 170         |           |
|       | G34       | 32        | 33   | 18   | 170                | 170         |           |
|       | G40       | 32        | 37   | 22   | 140                | 140         |           |
| 37.5  | K21       | 42        | 32   | 19   | 112                | 112         |           |
|       | K27       | 42        | 37   | 22   | 98                 | 98          |           |
|       | K32       | 42        | 44   | 24   | 91                 | 91          |           |
|       | K42       | 42        | 45   | 30   | 70                 | 70          |           |
| 52.5  | M16       | 57.5      | 45   | 30   | 50                 | 50          |           |

## Overview

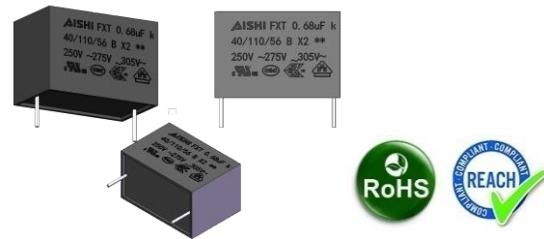
The FXT series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0. These FXT series robustness design is suitable for high humidity and high temperature environmental and compliant to THB Grade IIIB.

## Applications

Interference suppression, across-the-line capacitor, EMI filter and spark-killer in class X2 applications. Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.

## Features

- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Suitable for harsh environment conditions
- THB Grade IIIB (85°C, 85% RH, 1000h at U<sub>RAC</sub>)



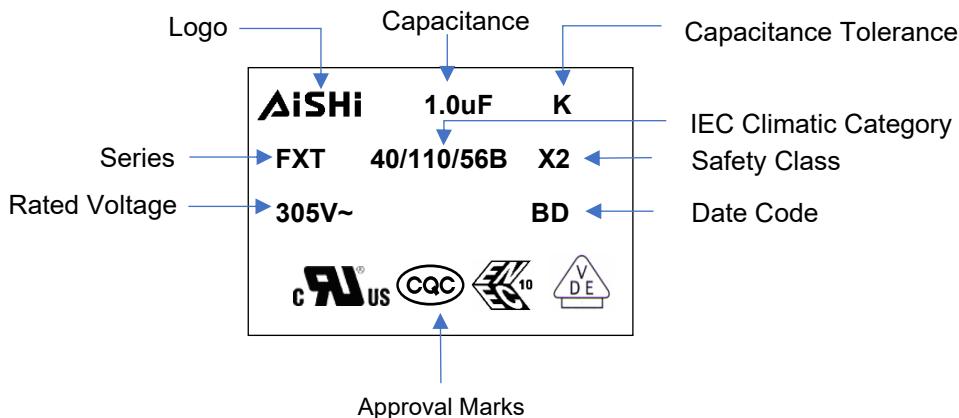
## Applicable Standard

| Approval | Standard   | File Number   |
|----------|--|---|
|          | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538 (305Vac~760Vac)   |
|          | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40051583 (305Vac)<br>40052137 (350Vac~760Vac)   |
|          | IEC 60384-14<br>GB/T6346.14-2015                 | CQC20001245437 (305Vac)<br>CQC20001281016 (350Vac~480Vac)<br>CQC20001281018 (530Vac~760Vac) |

## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 305Vac / 350Vac  |
| Capacitance Range           | 0.1μF to 20.0μF  |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |
| Climatic Category           | 40/110/56 IEC60068-1   |
| Dissipation Factor          | 0.0010 (20°C, 1KHz)  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 μF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 μF at 100 V; 1 min > 5000 MΩ*μF |

## Marking



## Part Number System

| F              | XT  | 30                     | K                               | 105   | G18                      | 2GL                          | 5                          |
|----------------|---|------------------------|---------------------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series                                    | Voltage (VAC)          | Tolerance                       | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | X2,<br>THB Type,<br>Metallized<br>PP Film | 30=305Vac<br>35=350Vac | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

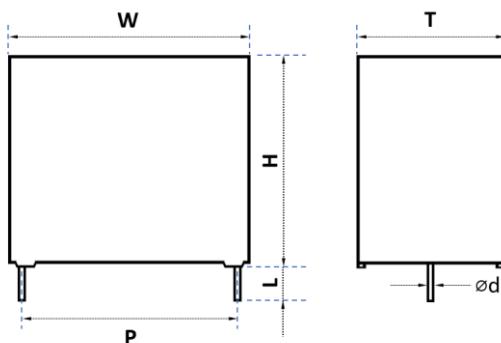
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 10.0mm                    | C | 5.1mm                             | A |
| 2 leads for straight cut          | 2 | 15.0mm                    | E | 7.5mm                             | C |
| 2 leads for forming cut           | E | 22.5mm                    | F | 10.2mm                            | B |
| 4 leads for straight cut          | 4 | 27.5mm                    | G | 12.7mm                            | G |
| Taping                            | T | 37.5mm                    | K | 20.3mm                            | D |
| Taping Straight                   | V | 52.5mm                    | M | N/A                               | L |
|                                   |   | N/A                       | N |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |
|             |   |

### Dimension (mm)



2 pins

### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | Ød        | Tolerance |
| E14       | 18        | 0.5       | 11   | 0.5       | 5    | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E17       | 18        | 0.5       | 12   | 0.5       | 6    | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E18       | 18        | 0.5       | 13.5 | 0.5       | 6    | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E29       | 18        | 0.5       | 13.5 | 0.5       | 7.5  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E34       | 18        | 0.5       | 14.5 | 0.5       | 8.5  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E43       | 18        | 0.5       | 16   | 0.5       | 10   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E47       | 18        | 0.5       | 19   | 0.5       | 11   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| F17       | 26        | 0.5       | 16.5 | 0.5       | 7    | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F20       | 26        | 0.5       | 17   | 0.5       | 8.5  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F24       | 26        | 0.5       | 19   | 0.5       | 10   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F26       | 26        | 0.5       | 20   | 0.5       | 11   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F27       | 26        | 0.5       | 22   | 0.5       | 12   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F29       | 26        | 0.5       | 23   | 0.5       | 13   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F34       | 26        | 0.5       | 29.5 | 0.5       | 14.5 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F36       | 26        | 0.5       | 25   | 0.5       | 15   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| G15       | 32        | 0.8       | 18   | 0.8       | 9    | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G22       | 32        | 0.8       | 24.5 | 0.8       | 13   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G25       | 32        | 0.8       | 24   | 0.8       | 14   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G33       | 32        | 0.8       | 28   | 0.8       | 18   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K27       | 42        | 1.0       | 37   | 1.0       | 22   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K32       | 42        | 1.0       | 44   | 1.0       | 24   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K42       | 42        | 1.0       | 45   | 1.0       | 30   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K82       | 42        | 1.0       | 32   | 1.0       | 17   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| M16       | 57.5      | 1.0       | 45   | 1.0       | 30   | 1.0       | 52.5  | 0.5       | 1.2       | 0.05      |

### Rating and Part Number

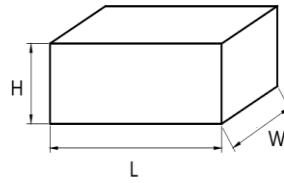
| Vac | Vdc | Cap Value<br>μF | Dimensions |         |         |         | Peak Current<br>A | Surge Current<br>A | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-----|-----------------|------------|---------|---------|---------|-------------------|--------------------|---------------|-----------------|------------------|
|     |     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm |                   |                    |               |                 |                  |
| 305 | 630 | 0.1             | 18         | 11      | 5       | 15      | 40                | 120                | 400           | 0.6             | FXT30K104E142EL5 |
| 305 | 630 | 0.15            | 18         | 12      | 6       | 15      | 60                | 180                | 400           | 0.6             | FXT30K154E172EL5 |
| 305 | 630 | 0.22            | 18         | 13.5    | 7.5     | 15      | 88                | 264                | 400           | 0.8             | FXT30K224E292EL5 |
| 305 | 630 | 0.27            | 18         | 14.5    | 8.5     | 15      | 108               | 324                | 400           | 0.8             | FXT30K274E342EL5 |
| 305 | 630 | 0.33            | 18         | 14.5    | 8.5     | 15      | 132               | 396                | 400           | 0.8             | FXT30K334E342EL5 |
| 305 | 630 | 0.47            | 18         | 16      | 10      | 15      | 188               | 564                | 400           | 0.8             | FXT30K474E432EL5 |
| 305 | 630 | 0.56            | 18         | 19      | 11      | 15      | 224               | 672                | 400           | 0.8             | FXT30K564E472EL5 |
| 305 | 630 | 0.68            | 18         | 19      | 11      | 15      | 272               | 816                | 400           | 0.8             | FXT30K684E472EL5 |
| 305 | 630 | 0.33            | 26         | 16.5    | 7       | 22.5    | 66                | 198                | 200           | 0.8             | FXT30K334F172FL5 |
| 305 | 630 | 0.47            | 26         | 16.5    | 7       | 22.5    | 94                | 282                | 200           | 0.8             | FXT30K474F172FL5 |
| 305 | 630 | 0.56            | 26         | 19      | 10      | 22.5    | 112               | 336                | 200           | 0.8             | FXT30K564F242FL5 |
| 305 | 630 | 0.68            | 26         | 19      | 10      | 22.5    | 136               | 408                | 200           | 0.8             | FXT30K684F242FL5 |
| 305 | 630 | 1               | 26         | 20      | 11      | 22.5    | 200               | 600                | 200           | 0.8             | FXT30K105F262FL5 |
| 305 | 630 | 1.2             | 26         | 22      | 12      | 22.5    | 240               | 720                | 200           | 0.8             | FXT30K125F272FL5 |
| 305 | 630 | 1.5             | 26         | 23      | 13      | 22.5    | 300               | 900                | 200           | 0.8             | FXT30K155F292FL5 |
| 305 | 630 | 1.8             | 26         | 29.5    | 14.5    | 22.5    | 360               | 1080               | 200           | 0.8             | FXT30K185F342FL5 |
| 305 | 630 | 2               | 26         | 29.5    | 14.5    | 22.5    | 400               | 1200               | 200           | 0.8             | FXT30K205F342FL5 |
| 305 | 630 | 2.2             | 26         | 29.5    | 14.5    | 22.5    | 440               | 1320               | 200           | 0.8             | FXT30M225F342FL5 |
| 305 | 630 | 0.68            | 32         | 18      | 9       | 27.5    | 102               | 306                | 150           | 0.8             | FXT30K684G152GL5 |
| 305 | 630 | 0.82            | 32         | 18      | 9       | 27.5    | 123               | 369                | 150           | 0.8             | FXT30K824G152GL5 |
| 305 | 630 | 1               | 32         | 20      | 11      | 27.5    | 150               | 450                | 150           | 0.8             | FXT30K105G182GL5 |
| 305 | 630 | 1.2             | 32         | 20      | 11      | 27.5    | 180               | 540                | 150           | 0.8             | FXT30M125G182GL5 |
| 305 | 630 | 1.5             | 32         | 24.5    | 13      | 27.5    | 225               | 675                | 150           | 0.8             | FXT30K155G222GL5 |
| 305 | 630 | 1.8             | 32         | 24.5    | 13      | 27.5    | 270               | 810                | 150           | 0.8             | FXT30K185G222GL5 |
| 305 | 630 | 2.2             | 32         | 24      | 14      | 27.5    | 330               | 990                | 150           | 0.8             | FXT30K225G252GL5 |
| 305 | 630 | 2.7             | 32         | 28      | 18      | 27.5    | 405               | 1215               | 150           | 0.8             | FXT30K275G332GL5 |
| 305 | 630 | 3.3             | 32         | 28      | 18      | 27.5    | 495               | 1485               | 150           | 0.8             | FXT30M335G332GL5 |
| 305 | 630 | 3.3             | 32         | 33      | 18      | 27.5    | 495               | 1485               | 150           | 0.8             | FXT30K335G342GL5 |
| 305 | 630 | 3.9             | 32         | 33      | 18      | 27.5    | 585               | 1755               | 150           | 0.8             | FXT30K395G342GL5 |
| 305 | 630 | 4.7             | 32         | 33      | 18      | 27.5    | 705               | 2115               | 150           | 0.8             | FXT30M475G342GL5 |
| 305 | 630 | 4.7             | 32         | 37      | 22      | 27.5    | 705               | 2115               | 150           | 0.8             | FXT30K475G402GL5 |
| 305 | 630 | 5.6             | 32         | 37      | 22      | 27.5    | 840               | 2520               | 150           | 0.8             | FXT30M565G402GL5 |
| 305 | 630 | 4.7             | 42         | 32      | 17      | 37.5    | 470               | 1410               | 100           | 1.0             | FXT30K475K822KL5 |
| 305 | 630 | 6.8             | 42         | 37      | 22      | 37.5    | 680               | 2040               | 100           | 1.0             | FXT30K685K272KL5 |
| 305 | 630 | 10              | 42         | 45      | 30      | 37.5    | 1000              | 3000               | 100           | 1.0             | FXT30K106K422KL5 |
| 305 | 630 | 12              | 42         | 45      | 30      | 37.5    | 1200              | 3600               | 100           | 1.0             | FXT30K126K422KL5 |
| 305 | 630 | 15              | 42         | 45      | 30      | 37.5    | 1500              | 4500               | 100           | 1.0             | FXT30K156K422KL5 |
| 305 | 630 | 18              | 57.5       | 45      | 30      | 52.5    | 1440              | 4500               | 80            | 1.2             | FXT30K186M162ML5 |
| 305 | 630 | 20              | 57.5       | 45      | 30      | 52.5    | 1600              | 4800               | 80            | 1.2             | FXT30K206M162ML5 |

### Rating and Part Number

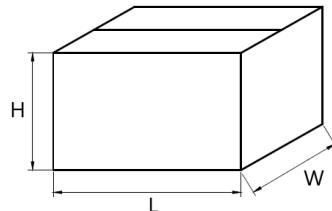
| Vac | Vdc | Cap Value<br>μF | Dimensions |         |         |         | Peak Current<br>A | Surge Current<br>A | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-----|-----------------|------------|---------|---------|---------|-------------------|--------------------|---------------|-----------------|------------------|
|     |     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm |                   |                    |               |                 |                  |
| 350 | 700 | 0.1             | 18         | 13.5    | 6       | 15      | 50                | 150                | 500           | 0.6             | FXT35K104E182EL5 |
| 350 | 700 | 0.15            | 18         | 13.5    | 7.5     | 15      | 75                | 225                | 500           | 0.8             | FXT35K154E292EL5 |
| 350 | 700 | 0.22            | 18         | 14.5    | 8.5     | 15      | 110               | 330                | 500           | 0.8             | FXT35K224E342EL5 |
| 350 | 700 | 0.33            | 18         | 16      | 10      | 15      | 165               | 495                | 500           | 0.8             | FXT35K334E432EL5 |
| 350 | 700 | 0.47            | 18         | 19      | 11      | 15      | 235               | 705                | 500           | 0.8             | FXT35M474E472EL5 |
| 350 | 700 | 0.47            | 26         | 17      | 8.5     | 22.5    | 188               | 564                | 400           | 0.8             | FXT35K474F202FL5 |
| 350 | 700 | 0.56            | 26         | 19      | 10      | 22.5    | 224               | 672                | 400           | 0.8             | FXT35K564F242FL5 |
| 350 | 700 | 0.68            | 26         | 20      | 11      | 22.5    | 272               | 816                | 400           | 0.8             | FXT35K684F262FL5 |
| 350 | 700 | 0.82            | 26         | 22      | 12      | 22.5    | 328               | 984                | 400           | 0.8             | FXT35K824F272FL5 |
| 350 | 700 | 1               | 26         | 23      | 13      | 22.5    | 400               | 1200               | 400           | 0.8             | FXT35K105F292FL5 |
| 350 | 700 | 1.2             | 26         | 25      | 15      | 22.5    | 480               | 1440               | 400           | 0.8             | FXT35K125F362FL5 |
| 350 | 700 | 1.5             | 26         | 29.5    | 14.5    | 22.5    | 600               | 1800               | 400           | 0.8             | FXT35K155F342FL5 |
| 350 | 700 | 1.8             | 32         | 28      | 14      | 22.5    | 360               | 1080               | 200           | 0.8             | FXT35K185G262GL5 |
| 350 | 700 | 2.0             | 32         | 28      | 14      | 27.5    | 400               | 1200               | 200           | 0.8             | FXT35M205G262GL5 |
| 350 | 700 | 2.2             | 32         | 28      | 18      | 27.5    | 440               | 1320               | 200           | 0.8             | FXT35K225G332GL5 |
| 350 | 700 | 2.7             | 32         | 28      | 18      | 27.5    | 540               | 1620               | 200           | 0.8             | FXT35M275G332GL5 |
| 350 | 700 | 3.0             | 32         | 33      | 18      | 27.5    | 600               | 1800               | 200           | 0.8             | FXT35K305G342GL5 |
| 350 | 700 | 3.3             | 32         | 33      | 18      | 27.5    | 660               | 1980               | 200           | 0.8             | FXT35M335G342GL5 |
| 350 | 700 | 3.9             | 32         | 37      | 22      | 27.5    | 780               | 2340               | 200           | 0.8             | FXT35K395G402GL5 |
| 350 | 700 | 4.7             | 32         | 37      | 22      | 27.5    | 940               | 2820               | 200           | 0.8             | FXT35M475G402GL5 |
| 350 | 700 | 4.7             | 42         | 32      | 19      | 37.5    | 470               | 1410               | 100           | 1.0             | FXT35K475K212KL5 |
| 350 | 700 | 5.6             | 42         | 37      | 22      | 37.5    | 560               | 1680               | 100           | 1.0             | FXT35K565K272KL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |      | Packaging Quantity |             |           |
|-------|-----------|-----------|------|------|--------------------|-------------|-----------|
|       |           | W         | H    | T    | Long Leads         | Short Leads | Ammo Pack |
| 15    | E14       | 18        | 11   | 5    | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6    | 800                | 867         | 560       |
|       | E18       | 18        | 13.5 | 6    | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5  | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5  | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10   | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11   | 600                | 476         | 300       |
| 22.5  | F17       | 26        | 16.5 | 7    |                    | 528         | 300       |
|       | F20       | 26        | 17   | 8.5  |                    | 432         | 250       |
|       | F24       | 26        | 19   | 10   |                    | 372         | 210       |
|       | F26       | 26        | 20   | 11   |                    | 336         | 190       |
|       | F27       | 26        | 22   | 12   |                    | 300         | 170       |
|       | F29       | 26        | 23   | 13   |                    | 276         | 160       |
|       | F34       | 26        | 29.5 | 14.5 |                    | 252         | 140       |
|       | F36       | 26        | 25   | 15   |                    | 240         | 140       |
| 27.5  | G15       | 32        | 18   | 9    |                    | 340         | 230       |
|       | G18       | 32        | 20   | 11   |                    | 280         | 190       |
|       | G22       | 32        | 24.5 | 13   |                    | 230         | 160       |
|       | G25       | 32        | 24   | 14   |                    | 220         | 150       |
|       | G26       | 32        | 28   | 14   |                    | 220         | 150       |
|       | G33       | 32        | 28   | 18   |                    | 170         | 110       |
|       | G34       | 32        | 33   | 18   |                    | 170         | 110       |
|       | G40       | 32        | 37   | 22   |                    | 140         | 90        |
| 37.5  | K21       | 42        | 32   | 19   |                    | 112         |           |
|       | K27       | 42        | 37   | 22   |                    | 98          |           |
|       | K32       | 42        | 44   | 24   |                    | 91          |           |
|       | K42       | 42        | 45   | 30   |                    | 70          |           |
|       | K82       | 42        | 32   | 17   |                    | 126         |           |
| 52.5  | M16       | 57.5      | 45   | 30   |                    | 50          |           |

## Overview

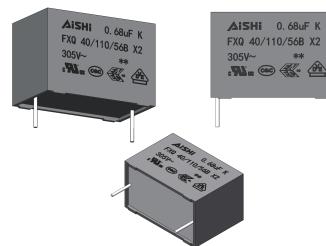
The FXQ capacitor is constructed of Metallized Polypropylene Film encapsulated with self-extinguishing resin in plastic box of material meeting the UL 94V-0 requirements. The series are suitable for harsh environment, qualify in accordance to AEC-Q200D requirement.

## Features

- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Suitable for harsh environment conditions
- THB Grade IIIB (85°C, 85% RH, 1000h at  $U_{RAC}$ )
- Automotive Grade (AEC-Q200D)

## Applications

Interference suppression, across-the-line capacitor, EMI filter and spark-killer in class X2 applications. Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.



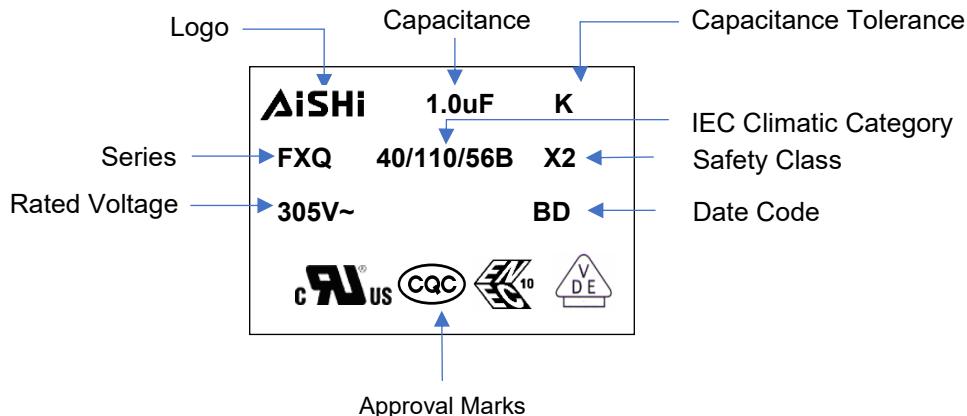
## Applicable Standard

| Approval | Standard   | File Number   |
|----------|--|---|
|          | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538 (305Vac~760Vac)   |
|          | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40051583 (305Vac)<br>40052137 (350Vac~760Vac)   |
|          | IEC 60384-14<br>GB/T6346.14-2015                 | CQC20001245437 (305Vac)<br>CQC20001281016 (350Vac~480Vac)<br>CQC20001281018 (530Vac~760Vac) |

## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 305Vac / 350Vac  |
| Capacitance Range           | 0.1μF to 15μF  |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |
| Climatic Category           | 40/110/56 IEC60068-1   |
| Dissipation Factor          | 0.0010 (20°C, 1KHz)  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 μF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 μF at 100 V; 1 min > 5000 MΩ*μF |

## Marking



## Part Number System

| F              | XQ  | 30                     | K                    | 105   | G18                      | 2GL                          | 5                          |
|----------------|---|------------------------|----------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series  | Voltage (VAC)          | Tolerance            | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | X2,<br>AEC-Q200<br>Type,<br>Metallized<br>PP Film | 30=305Vac<br>35=350Vac | K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Dimension Table | Refer to Terminal Code Table | Refer to Lead Length Table |

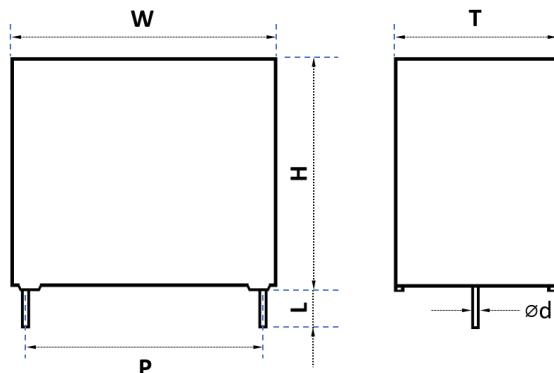
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 10.0mm                    | C | 5.1mm                             | A |
| 2 leads for straight cut          | 2 | 15.0mm                    | E | 7.5mm                             | C |
| 2 leads for forming cut           | E | 22.5mm                    | F | 10.2mm                            | B |
| 4 leads for straight cut          | 4 | 27.5mm                    | G | 12.7mm                            | G |
| Taping                            | T | 37.5mm                    | K | 20.3mm                            | D |
| Taping Straight                   | V | 52.5mm                    | M | N/A                               | L |
|                                   |   | N/A                       | N |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |
|             |   |

### Dimension (mm)



2 pins

### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | Ød        | Tolerance |
| E14       | 18        | 0.5       | 11   | 0.5       | 5    | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E17       | 18        | 0.5       | 12   | 0.5       | 6    | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E18       | 18        | 0.5       | 13.5 | 0.5       | 6    | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E29       | 18        | 0.5       | 13.5 | 0.5       | 7.5  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E34       | 18        | 0.5       | 14.5 | 0.5       | 8.5  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E43       | 18        | 0.5       | 16   | 0.5       | 10   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E47       | 18        | 0.5       | 19   | 0.5       | 11   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| F17       | 26        | 0.5       | 16.5 | 0.5       | 7    | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F20       | 26        | 0.5       | 17   | 0.5       | 8.5  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F24       | 26        | 0.5       | 19   | 0.5       | 10   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F26       | 26        | 0.5       | 20   | 0.5       | 11   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F27       | 26        | 0.5       | 22   | 0.5       | 12   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F29       | 26        | 0.5       | 23   | 0.5       | 13   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F34       | 26        | 0.5       | 29.5 | 0.5       | 14.5 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F36       | 26        | 0.5       | 25   | 0.5       | 15   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| G15       | 32        | 0.8       | 18   | 0.8       | 9    | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G22       | 32        | 0.8       | 24.5 | 0.8       | 13   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G25       | 32        | 0.8       | 24   | 0.8       | 14   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G33       | 32        | 0.8       | 28   | 0.8       | 18   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K27       | 42        | 1.0       | 37   | 1.0       | 22   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K32       | 42        | 1.0       | 44   | 1.0       | 24   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K42       | 42        | 1.0       | 45   | 1.0       | 30   | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |

**Rating and Part Number**

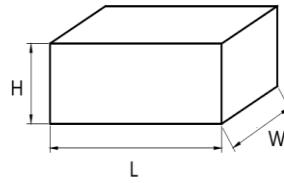
| Vac | Vdc | Cap Value | Dimensions |      |      |      | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|------|------|------|--------------|---------------|-------|-----------|------------------|
|     |     |           | w          | H    | T    | P    |              |               |       |           |                  |
|     |     |           | μF         | mm   | mm   | mm   | A            | A             | V/us  | mm        |                  |
| 305 | 630 | 0.1       | 18         | 11   | 5    | 15   | 40           | 120           | 400   | 0.6       | FXQ30K104E142EL5 |
| 305 | 630 | 0.15      | 18         | 12   | 6    | 15   | 60           | 180           | 400   | 0.6       | FXQ30K154E172EL5 |
| 305 | 630 | 0.22      | 18         | 13.5 | 7.5  | 15   | 88           | 264           | 400   | 0.8       | FXQ30K224E292EL5 |
| 305 | 630 | 0.27      | 18         | 14.5 | 8.5  | 15   | 108          | 324           | 400   | 0.8       | FXQ30K274E342EL5 |
| 305 | 630 | 0.33      | 18         | 14.5 | 8.5  | 15   | 132          | 396           | 400   | 0.8       | FXQ30K334E342EL5 |
| 305 | 630 | 0.47      | 18         | 16   | 10   | 15   | 188          | 564           | 400   | 0.8       | FXQ30K474E432EL5 |
| 305 | 630 | 0.56      | 18         | 19   | 11   | 15   | 224          | 672           | 400   | 0.8       | FXQ30K564E472EL5 |
| 305 | 630 | 0.68      | 18         | 19   | 11   | 15   | 272          | 816           | 400   | 0.8       | FXQ30K684E472EL5 |
| 305 | 630 | 0.33      | 26         | 16.5 | 7    | 22.5 | 66           | 198           | 200   | 0.8       | FXQ30K334F172FL5 |
| 305 | 630 | 0.47      | 26         | 16.5 | 7    | 22.5 | 94           | 282           | 200   | 0.8       | FXQ30K474F172FL5 |
| 305 | 630 | 0.56      | 26         | 19   | 10   | 22.5 | 112          | 336           | 200   | 0.8       | FXQ30K564F242FL5 |
| 305 | 630 | 0.68      | 26         | 19   | 10   | 22.5 | 136          | 408           | 200   | 0.8       | FXQ30K684F242FL5 |
| 305 | 630 | 1         | 26         | 20   | 11   | 22.5 | 200          | 600           | 200   | 0.8       | FXQ30K105F262FL5 |
| 305 | 630 | 1.2       | 26         | 22   | 12   | 22.5 | 240          | 720           | 200   | 0.8       | FXQ30K125F272FL5 |
| 305 | 630 | 1.5       | 26         | 23   | 13   | 22.5 | 300          | 900           | 200   | 0.8       | FXQ30K155F292FL5 |
| 305 | 630 | 1.8       | 26         | 29.5 | 14.5 | 22.5 | 360          | 1080          | 200   | 0.8       | FXQ30K185F342FL5 |
| 305 | 630 | 2         | 26         | 29.5 | 14.5 | 22.5 | 400          | 1200          | 200   | 0.8       | FXQ30K205F342FL5 |
| 305 | 630 | 2.2       | 26         | 29.5 | 14.5 | 22.5 | 440          | 1320          | 200   | 0.8       | FXQ30M225F342FL5 |
| 305 | 630 | 0.68      | 32         | 18   | 9    | 27.5 | 102          | 306           | 150   | 0.8       | FXQ30K684G152GL5 |
| 305 | 630 | 0.82      | 32         | 18   | 9    | 27.5 | 123          | 369           | 150   | 0.8       | FXQ30K824G152GL5 |
| 305 | 630 | 1         | 32         | 20   | 11   | 27.5 | 150          | 450           | 150   | 0.8       | FXQ30K105G182GL5 |
| 305 | 630 | 1.2       | 32         | 20   | 11   | 27.5 | 180          | 540           | 150   | 0.8       | FXQ30M125G182GL5 |
| 305 | 630 | 1.5       | 32         | 24.5 | 13   | 27.5 | 225          | 675           | 150   | 0.8       | FXQ30K155G222GL5 |
| 305 | 630 | 1.8       | 32         | 24.5 | 13   | 27.5 | 270          | 810           | 150   | 0.8       | FXQ30K185G222GL5 |
| 305 | 630 | 2.2       | 32         | 24   | 14   | 27.5 | 330          | 990           | 150   | 0.8       | FXQ30K225G252GL5 |
| 305 | 630 | 2.7       | 32         | 28   | 18   | 27.5 | 405          | 1215          | 150   | 0.8       | FXQ30K275G332GL5 |
| 305 | 630 | 3.3       | 32         | 28   | 18   | 27.5 | 495          | 1485          | 150   | 0.8       | FXQ30M335G332GL5 |
| 305 | 630 | 3.3       | 32         | 33   | 18   | 27.5 | 495          | 1485          | 150   | 0.8       | FXQ30K335G342GL5 |
| 305 | 630 | 3.9       | 32         | 33   | 18   | 27.5 | 585          | 1755          | 150   | 0.8       | FXQ30K395G342GL5 |
| 305 | 630 | 4.7       | 32         | 33   | 18   | 27.5 | 705          | 2115          | 150   | 0.8       | FXQ30M475G342GL5 |
| 305 | 630 | 4.7       | 32         | 37   | 22   | 27.5 | 705          | 2115          | 150   | 0.8       | FXQ30K475G402GL5 |
| 305 | 630 | 5.6       | 32         | 37   | 22   | 27.5 | 840          | 2520          | 150   | 0.8       | FXQ30M565G402GL5 |
| 305 | 630 | 4.7       | 42         | 32   | 19   | 37.5 | 470          | 1410          | 100   | 1.0       | FXQ30K475K212KL5 |
| 305 | 630 | 6.8       | 42         | 37   | 22   | 37.5 | 680          | 2040          | 100   | 1.0       | FXQ30K685K272KL5 |
| 305 | 630 | 10        | 42         | 45   | 30   | 37.5 | 1000         | 3000          | 100   | 1.0       | FXQ30K106K422KL5 |
| 305 | 630 | 12        | 42         | 45   | 30   | 37.5 | 1200         | 3600          | 100   | 1.0       | FXQ30K126K422KL5 |
| 305 | 630 | 15        | 42         | 45   | 30   | 37.5 | 1500         | 4500          | 100   | 1.0       | FXQ30K156K422KL5 |

### Rating and Part Number

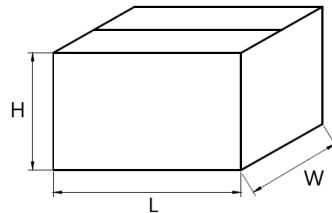
| Vac | Vdc | Cap Value | Dimensions |      |      |      | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|------|------|------|--------------|---------------|-------|-----------|------------------|
|     |     |           | w          | H    | T    | P    |              |               |       |           |                  |
|     |     | μF        | mm         | mm   | mm   | mm   | A            | A             | V/us  | mm        |                  |
| 350 | 700 | 0.1       | 18         | 13.5 | 6    | 15   | 50           | 150           | 500   | 0.6       | FXQ35K104E182EL5 |
| 350 | 700 | 0.15      | 18         | 13.5 | 7.5  | 15   | 75           | 225           | 500   | 0.8       | FXQ35K154E292EL5 |
| 350 | 700 | 0.22      | 18         | 14.5 | 8.5  | 15   | 110          | 330           | 500   | 0.8       | FXQ35K224E342EL5 |
| 350 | 700 | 0.33      | 18         | 16   | 10   | 15   | 165          | 495           | 500   | 0.8       | FXQ35K334E432EL5 |
| 350 | 700 | 0.47      | 18         | 19   | 11   | 15   | 235          | 705           | 500   | 0.8       | FXQ35M474E472EL5 |
| 350 | 700 | 0.47      | 26         | 17   | 8.5  | 22.5 | 188          | 564           | 400   | 0.8       | FXQ35K474F202FL5 |
| 350 | 700 | 0.56      | 26         | 19   | 10   | 22.5 | 224          | 672           | 400   | 0.8       | FXQ35K564F242FL5 |
| 350 | 700 | 0.68      | 26         | 20   | 11   | 22.5 | 272          | 816           | 400   | 0.8       | FXQ35K684F262FL5 |
| 350 | 700 | 0.82      | 26         | 22   | 12   | 22.5 | 328          | 984           | 400   | 0.8       | FXQ35K824F272FL5 |
| 350 | 700 | 1         | 26         | 23   | 13   | 22.5 | 400          | 1200          | 400   | 0.8       | FXQ35K105F292FL5 |
| 350 | 700 | 1.2       | 26         | 25   | 15   | 22.5 | 480          | 1440          | 400   | 0.8       | FXQ35K125F362FL5 |
| 350 | 700 | 1.5       | 26         | 29.5 | 14.5 | 22.5 | 600          | 1800          | 400   | 0.8       | FXQ35K155F342FL5 |
| 350 | 700 | 1.8       | 32         | 28   | 14   | 22.5 | 360          | 1080          | 200   | 0.8       | FXQ35K185G262GL5 |
| 350 | 700 | 2.0       | 32         | 28   | 14   | 27.5 | 400          | 1200          | 200   | 0.8       | FXQ35M205G262GL5 |
| 350 | 700 | 2.2       | 32         | 28   | 18   | 27.5 | 440          | 1320          | 200   | 0.8       | FXQ35K225G332GL5 |
| 350 | 700 | 2.7       | 32         | 28   | 18   | 27.5 | 540          | 1620          | 200   | 0.8       | FXQ35M275G332GL5 |
| 350 | 700 | 3.0       | 32         | 33   | 18   | 27.5 | 600          | 1800          | 200   | 0.8       | FXQ35K305G342GL5 |
| 350 | 700 | 3.3       | 32         | 33   | 18   | 27.5 | 660          | 1980          | 200   | 0.8       | FXQ35M335G342GL5 |
| 350 | 700 | 3.9       | 32         | 37   | 22   | 27.5 | 780          | 2340          | 200   | 0.8       | FXQ35K395G402GL5 |
| 350 | 700 | 4.7       | 32         | 37   | 22   | 27.5 | 940          | 2820          | 200   | 0.8       | FXQ35M475G402GL5 |
| 350 | 700 | 4.7       | 42         | 32   | 19   | 37.5 | 470          | 1410          | 100   | 1.0       | FXQ35K475K212KL5 |
| 350 | 700 | 5.6       | 42         | 37   | 22   | 37.5 | 560          | 1680          | 100   | 1.0       | FXQ35K565K272KL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |      | Packaging Quantity |             |           |
|-------|-----------|-----------|------|------|--------------------|-------------|-----------|
|       |           | W         | H    | T    | Long Leads         | Short Leads | Ammo Pack |
| 15    | E14       | 18        | 11   | 5    | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6    | 800                | 867         | 560       |
|       | E18       | 18        | 13.5 | 6    | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5  | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5  | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10   | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11   | 600                | 476         | 300       |
| 22.5  | F17       | 26        | 16.5 | 7    |                    | 528         | 300       |
|       | F20       | 26        | 17   | 8.5  |                    | 432         | 250       |
|       | F24       | 26        | 19   | 10   |                    | 372         | 210       |
|       | F26       | 26        | 20   | 11   |                    | 336         | 190       |
|       | F27       | 26        | 22   | 12   |                    | 300         | 170       |
|       | F29       | 26        | 23   | 13   |                    | 276         | 160       |
|       | F34       | 26        | 29.5 | 14.5 |                    | 252         | 140       |
|       | F36       | 26        | 25   | 15   |                    | 240         | 140       |
| 27.5  | G15       | 32        | 18   | 9    |                    | 340         | 230       |
|       | G18       | 32        | 20   | 11   |                    | 280         | 190       |
|       | G22       | 32        | 24.5 | 13   |                    | 230         | 160       |
|       | G25       | 32        | 24   | 14   |                    | 220         | 150       |
|       | G26       | 32        | 28   | 14   |                    | 220         | 150       |
|       | G33       | 32        | 28   | 18   |                    | 170         | 110       |
|       | G34       | 32        | 33   | 18   |                    | 170         | 110       |
|       | G40       | 32        | 37   | 22   |                    | 140         | 90        |
| 37.5  | K21       | 42        | 32   | 19   |                    | 112         |           |
|       | K27       | 42        | 37   | 22   |                    | 98          |           |
|       | K32       | 42        | 44   | 24   |                    | 91          |           |
|       | K42       | 42        | 45   | 30   |                    | 70          |           |

## Overview

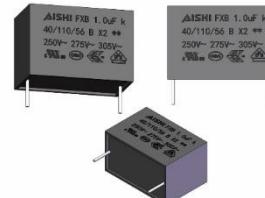
The FXB series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0. These FXB series robustness design is suitable for harsh environmental conditions and compliant to THB Grade IIIB.

## Features

- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Suitable for harsh environmental conditions
- THB Grade IIIB  
(85°C 85%RH 1.0Un for 1000 hours)

## Applications

Interference suppression and specifically designed for applications in serial with the main, capacitive power suppliers and energy meter.



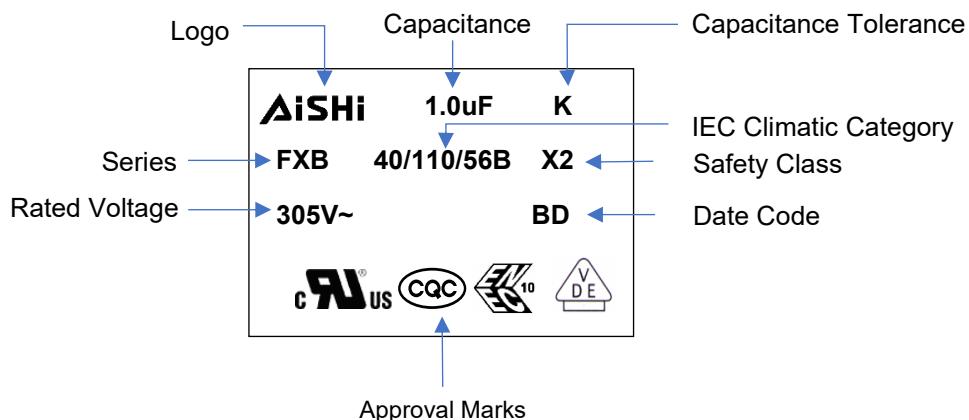
## Applicable Standard

| Approval | Standard   | File Number    |
|----------|--|----------------|
|          | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538        |
|          | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40051583       |
|          | IEC 60384-14<br>GB/T6346.14-2015                 | CQC20001245437 |

## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 305Vac   |
| Capacitance Range           | 0.1µF to 4.7µF   |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |
| Climatic Category           | 40/110/56 IEC60068-1   |
| Dissipation Factor          | 0.0010 (20°C, 1KHz)  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 5000 MΩ*µF |

## Marking



## Part Number System

| F              | XB  | 30            | K                               | 105   | F29                      | 2FL                          | 5                          |
|----------------|---|---------------|---------------------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series  | Voltage (VAC) | Tolerance                       | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | X2, Capacitive Divider Type, Metallized PP Film | 305           | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Dimension Table | Refer to Terminal Code Table | Refer to Lead Length Table |

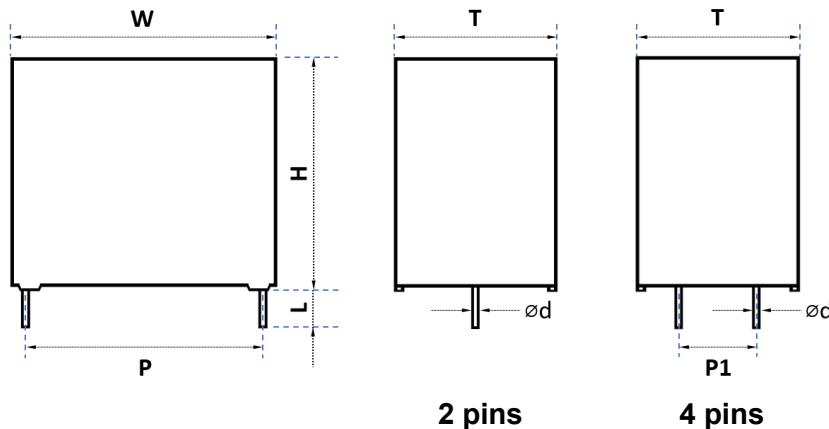
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 10.0mm                    | C | 5.1mm                             | A |
| 2 leads for straight cut          | 2 | 12.5mm                    | D | 7.5mm                             | C |
| 2 leads for forming cut           | E | 15.0mm                    | E | 10.2mm                            | B |
| 4 leads for straight cut          | 4 | 22.5mm                    | F | 12.7mm                            | G |
| Taping                            | T | 27.5mm                    | G | 20.3mm                            | D |
| Taping Straight                   | V | 37.5mm                    | K | N/A                               | L |
|                                   |   | 57.5mm                    | M |                                   |   |
|                                   |   | N/A                       | N |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 2.5mm       | A |
| 2.8mm       | C |
| 3.0mm       | 3 |
| 3.2mm       | 1 |
| 3.5mm       | 2 |
| 3.8mm       | E |
| 4.0mm       | 4 |
| 4.5mm       | D |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| 20mm min    | L |
| 35mm min    | B |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire       |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | $\varnothing d$ | Tolerance |
| E29       | 18.0      | 0.5       | 13.5 | 0.5       | 7.5  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E34       | 18.0      | 0.5       | 14.5 | 0.5       | 8.5  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E43       | 18.0      | 0.5       | 16.0 | 0.5       | 10.0 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E47       | 18.0      | 0.5       | 19.0 | 0.5       | 11.0 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| F26       | 26.0      | 0.5       | 20.0 | 0.5       | 11.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F27       | 26.0      | 0.5       | 22.0 | 0.5       | 12.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F29       | 26.0      | 0.5       | 23.0 | 0.5       | 13.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| G21       | 32.0      | 0.8       | 22.0 | 0.8       | 13.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G26       | 32.0      | 0.8       | 28.0 | 0.8       | 14.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G27       | 32.0      | 0.8       | 24.5 | 0.8       | 15.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G33       | 32.0      | 0.8       | 28.0 | 0.8       | 18.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G34       | 32.0      | 0.8       | 33.0 | 0.8       | 18.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G40       | 32.0      | 0.8       | 37.0 | 0.8       | 22.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |

**Metallized Polypropylene Film EMI Suppression Capacitors**  
**FXB Series** - Class X2 305VAC for Capacitive Divider (THB)

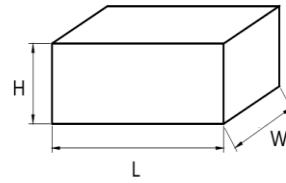


**Rating and Part Number**

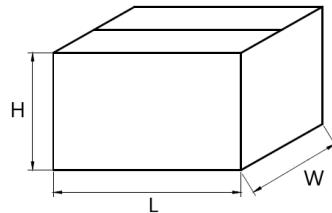
| Vac | Vdc | Cap Value<br>μF | Dimensions |         |         |         | Peak Current<br>A | Surge Current<br>A | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-----|-----------------|------------|---------|---------|---------|-------------------|--------------------|---------------|-----------------|------------------|
|     |     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm |                   |                    |               |                 |                  |
| 305 | 630 | 0.10            | 18.0       | 13.5    | 7.5     | 15.0    | 40                | 120                | 400           | 0.8             | FXB30K104E292EL5 |
| 305 | 630 | 0.15            | 18.0       | 14.5    | 8.5     | 15.0    | 60                | 180                | 400           | 0.8             | FXB30K154E342EL5 |
| 305 | 630 | 0.22            | 18.0       | 16.0    | 10.0    | 15.0    | 88                | 264                | 400           | 0.8             | FXB30K224E432EL5 |
| 305 | 630 | 0.33            | 18.0       | 19.0    | 11.0    | 15.0    | 132               | 396                | 400           | 0.8             | FXB30K334E472EL5 |
| 305 | 630 | 0.47            | 26.0       | 20.0    | 11.0    | 22.5    | 94                | 282                | 200           | 0.8             | FXB30K474F262FL5 |
| 305 | 630 | 0.56            | 26.0       | 20.0    | 11.0    | 22.5    | 112               | 336                | 200           | 0.8             | FXB30K564F262FL5 |
| 305 | 630 | 0.68            | 26.0       | 22.0    | 12.0    | 22.5    | 136               | 408                | 200           | 0.8             | FXB30K684F272FL5 |
| 305 | 630 | 0.82            | 26.0       | 22.0    | 12.0    | 22.5    | 164               | 492                | 200           | 0.8             | FXB30K824F272FL5 |
| 305 | 630 | 1.00            | 26.0       | 22.0    | 12.0    | 22.5    | 200               | 600                | 200           | 0.8             | FXB30K105F272FL5 |
| 305 | 630 | 1.00            | 26.0       | 23.0    | 13.0    | 22.5    | 200               | 600                | 200           | 0.8             | FXB30K105F292FL5 |
| 305 | 630 | 1.00            | 32.0       | 22.0    | 13.0    | 27.5    | 150               | 450                | 150           | 0.8             | FXB30K105G212GL5 |
| 305 | 630 | 1.20            | 32.0       | 28.0    | 14.0    | 27.5    | 180               | 540                | 150           | 0.8             | FXB30K125G262GL5 |
| 305 | 630 | 1.50            | 32.0       | 24.5    | 15.0    | 27.5    | 225               | 675                | 150           | 0.8             | FXB30K155G272GL5 |
| 305 | 630 | 1.50            | 32.0       | 28.0    | 14.0    | 27.5    | 225               | 675                | 150           | 0.8             | FXB30K155G262GL5 |
| 305 | 630 | 1.80            | 32.0       | 33.0    | 18.0    | 27.5    | 270               | 810                | 150           | 0.8             | FXB30K185G342GL5 |
| 305 | 630 | 2.00            | 32.0       | 33.0    | 18.0    | 27.5    | 300               | 900                | 150           | 0.8             | FXB30K205G342GL5 |
| 305 | 630 | 2.20            | 32.0       | 28.0    | 18.0    | 27.5    | 330               | 990                | 150           | 0.8             | FXB30K225G332GL5 |
| 305 | 630 | 2.20            | 32.0       | 33.0    | 18.0    | 27.5    | 330               | 660                | 150           | 0.8             | FXB30K225G342GL5 |
| 305 | 630 | 3.30            | 32.0       | 33.0    | 18.0    | 27.5    | 495               | 1485               | 150           | 0.8             | FXB30K335G342GL5 |
| 305 | 630 | 4.70            | 32.0       | 37.0    | 22.0    | 27.5    | 705               | 2115               | 150           | 0.8             | FXB30K475G402GL5 |

## Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



## Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 15    | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F26       | 26        | 20   | 11  |                    | 336         | 190       |
|       | F27       | 26        | 22   | 12  |                    | 300         | 170       |
|       | F29       | 26        | 23   | 13  |                    | 276         | 160       |
| 27.5  | G21       | 32        | 22   | 13  |                    | 230         | 160       |
|       | G26       | 32        | 28   | 14  |                    | 220         | 150       |
|       | G27       | 32        | 24.5 | 15  |                    | 200         | 140       |
|       | G33       | 32        | 28   | 18  |                    | 170         | 110       |
|       | G34       | 32        | 33   | 18  |                    | 170         | 110       |
|       | G40       | 32        | 37   | 22  |                    | 140         | 90        |

## Overview

The FXM series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0.

## Applications

Interference suppression, across-the-line capacitor, EMI filter and spark-killer in class X2 applications. Only suitable for use in charger and adapter. Not for AC filtering, capacitive divider and connection in series with the main.

## Features

- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin



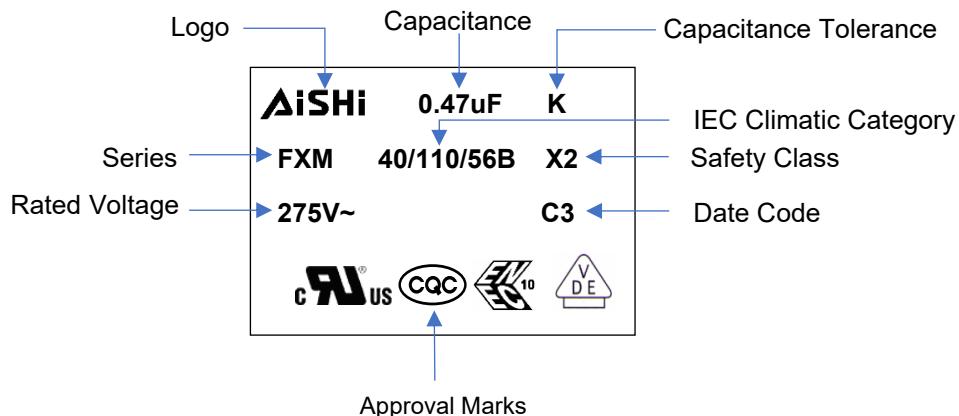
## Applicable Standard

| Approval | Standard   | File Number    |
|----------|--|----------------|
|          | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538        |
|          | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40051583       |
|          | IEC 60384-14<br>GB/T6346.14-2015                 | CQC20001245437 |

## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 275Vac   |
| Capacitance Range           | 0.1µF to 1.2µF   |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |
| Climatic Category           | 40/110/56 IEC60068-1   |
| Dissipation Factor          | 0.0010 (20°C, 1KHz)  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 5000 MΩ*µF |

## Marking



## Part Number System

| F              | XM                           | 27            | K                    | 474   | E21                      | 2EL                          | 5                          |
|----------------|------------------------------|---------------|----------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series                       | Voltage (VAC) | Tolerance            | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | Class X2, Metallized PP Film | 250<br>275    | K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

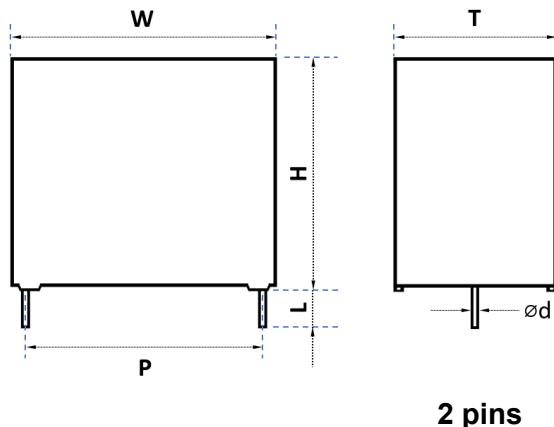
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 10.0mm                    | C | N/A                               | L |
| 2 leads for straight cut          | 2 | 12.5mm                    | D |                                   |   |
| 2 leads for forming cut           | E | 15.0mm                    | E |                                   |   |
| 2 leads for Taping                | T |                           |   |                                   |   |
| 2 leads for Taping Straight       | V |                           |   |                                   |   |
| 2 leads for 90° bent cut          | Y |                           |   |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 20mm min    | L |
| 3.2mm       | 1 |
| 3.5mm       | 2 |
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | Ød        | Tolerance |
| C13       | 13.0      | 0.5       | 11.0 | 0.5       | 5.0  | 0.5       | 10.0  | 0.5       | 0.6       | 0.05      |
| C16       | 13.0      | 0.5       | 12.0 | 0.5       | 6.0  | 0.5       | 10.0  | 0.5       | 0.6       | 0.05      |
| C24       | 13.0      | 0.5       | 13.0 | 0.5       | 7.0  | 0.5       | 10.0  | 0.5       | 0.6       | 0.05      |
| C25       | 13.0      | 0.5       | 14.0 | 0.5       | 7.0  | 0.5       | 10.0  | 0.5       | 0.6       | 0.05      |
| C27       | 13.0      | 0.5       | 16.0 | 0.5       | 8.0  | 0.5       | 10.0  | 0.5       | 0.6       | 0.05      |
| C28       | 13.0      | 0.5       | 17.0 | 0.5       | 8.0  | 0.5       | 10.0  | 0.5       | 0.6       | 0.05      |
| C29       | 13.0      | 0.5       | 19.0 | 0.5       | 8.0  | 0.5       | 10.0  | 0.5       | 0.6       | 0.05      |
| D10       | 15.0      | 0.5       | 11.5 | 0.5       | 6.0  | 0.5       | 12.5  | 0.5       | 0.6       | 0.05      |
| D11       | 15.0      | 0.5       | 12.5 | 0.5       | 6.5  | 0.5       | 12.5  | 0.5       | 0.6       | 0.05      |
| D14       | 15.0      | 0.5       | 13.5 | 0.5       | 7.0  | 0.5       | 12.5  | 0.5       | 0.6       | 0.05      |
| D16       | 15.0      | 0.5       | 14.0 | 0.5       | 8.5  | 0.5       | 12.5  | 0.5       | 0.6       | 0.05      |
| D19       | 15.0      | 0.5       | 15.5 | 0.5       | 10.0 | 0.5       | 12.5  | 0.5       | 0.6       | 0.05      |
| D20       | 15.0      | 0.5       | 16.0 | 0.5       | 10.0 | 0.5       | 12.5  | 0.5       | 0.6       | 0.05      |
| E14       | 18.0      | 0.5       | 11.0 | 0.5       | 5.0  | 0.5       | 15.0  | 0.5       | 0.6       | 0.05      |
| E17       | 18.0      | 0.5       | 12.0 | 0.5       | 6.0  | 0.5       | 15.0  | 0.5       | 0.6       | 0.05      |
| E18       | 18.0      | 0.5       | 13.5 | 0.5       | 6.0  | 0.5       | 15.0  | 0.5       | 0.6       | 0.05      |
| E21       | 18.0      | 0.5       | 13.0 | 0.5       | 7.0  | 0.5       | 15.0  | 0.5       | 0.8       | 0.05      |
| E31       | 18.0      | 0.5       | 14.0 | 0.5       | 8.0  | 0.5       | 15.0  | 0.5       | 0.8       | 0.05      |
| E33       | 18.0      | 0.5       | 16.0 | 0.5       | 8.0  | 0.5       | 15.0  | 0.5       | 0.8       | 0.05      |
| E43       | 18.0      | 0.5       | 16.0 | 0.5       | 10.0 | 0.5       | 15.0  | 0.5       | 0.8       | 0.05      |
| E45       | 18.0      | 0.5       | 18.0 | 0.5       | 10.0 | 0.5       | 15.0  | 0.5       | 0.8       | 0.05      |
| E47       | 18.0      | 0.5       | 19.0 | 0.5       | 11.0 | 0.5       | 15.0  | 0.5       | 0.8       | 0.05      |

# Metalized Polypropylene Film EMI Suppression Capacitors

## **FXM Series** - Class X2 250\275VAC (Miniature)

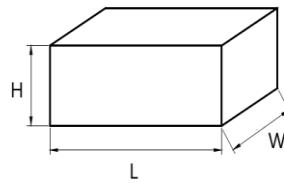


### Rating and Part Number

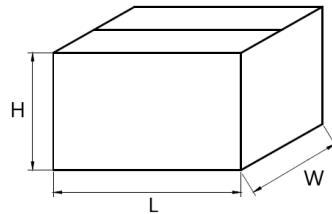
| Vac | Vdc | Cap Value | Dimensions |      |      |      | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|------|------|------|--------------|---------------|-------|-----------|------------------|
|     |     |           | W          | H    | T    | P    |              |               |       |           |                  |
|     |     | μF        | mm         | mm   | mm   | mm   | A            | A             | V/us  | mm        |                  |
| 275 | 560 | 0.1       | 13.0       | 11.0 | 5.0  | 10.0 | 50           | 150           | 500   | 0.6       | FXM27K104C132CL5 |
| 275 | 560 | 0.12      | 13.0       | 11.0 | 5.0  | 10.0 | 60           | 180           | 500   | 0.6       | FXM27K124C132CL5 |
| 275 | 560 | 0.15      | 13.0       | 11.0 | 5.0  | 10.0 | 75           | 225           | 500   | 0.6       | FXM27K154C132CL5 |
| 275 | 560 | 0.18      | 13.0       | 12.0 | 6.0  | 10.0 | 90           | 270           | 500   | 0.6       | FXM27K184C162CL5 |
| 275 | 560 | 0.2       | 13.0       | 12.0 | 6.0  | 10.0 | 100          | 300           | 500   | 0.6       | FXM27K204C162CL5 |
| 275 | 560 | 0.22      | 13.0       | 13.0 | 7.0  | 10.0 | 110          | 330           | 500   | 0.6       | FXM27K224C242CL5 |
| 275 | 560 | 0.27      | 13.0       | 14.0 | 7.0  | 10.0 | 135          | 405           | 500   | 0.6       | FXM27K274C252CL5 |
| 275 | 560 | 0.33      | 13.0       | 16.0 | 8.0  | 10.0 | 165          | 495           | 500   | 0.6       | FXM27K334C272CL5 |
| 275 | 560 | 0.39      | 13.0       | 17.0 | 8.0  | 10.0 | 195          | 585           | 500   | 0.6       | FXM27K394C282CL5 |
| 275 | 560 | 0.47      | 13.0       | 19.0 | 8.0  | 10.0 | 235          | 705           | 500   | 0.6       | FXM27K474C292CL5 |
| 275 | 560 | 0.22      | 15.0       | 11.5 | 6.0  | 12.5 | 110          | 330           | 500   | 0.6       | FXM27K224D102DL5 |
| 275 | 560 | 0.27      | 15.0       | 11.5 | 6.0  | 12.5 | 135          | 405           | 500   | 0.6       | FXM27K274D102DL5 |
| 275 | 560 | 0.33      | 15.0       | 12.5 | 6.5  | 12.5 | 165          | 495           | 500   | 0.6       | FXM27K334D112DL5 |
| 275 | 560 | 0.39      | 15.0       | 13.5 | 7.0  | 12.5 | 195          | 585           | 500   | 0.6       | FXM27K394D142DL5 |
| 275 | 560 | 0.47      | 15.0       | 14.0 | 8.5  | 12.5 | 235          | 705           | 500   | 0.6       | FXM27K474D162DL5 |
| 275 | 560 | 0.56      | 15.0       | 15.5 | 10.0 | 12.5 | 280          | 840           | 500   | 0.6       | FXM27K564D192DL5 |
| 275 | 560 | 0.68      | 15.0       | 16.0 | 10.0 | 12.5 | 340          | 1020          | 500   | 0.6       | FXM27K684D202DL5 |
| 275 | 560 | 0.1       | 18.0       | 11.0 | 5.0  | 15.0 | 40           | 120           | 400   | 0.6       | FXM27K104E142EL5 |
| 275 | 560 | 0.12      | 18.0       | 11.0 | 5.0  | 15.0 | 48           | 144           | 400   | 0.6       | FXM27K124E142EL5 |
| 275 | 560 | 0.15      | 18.0       | 11.0 | 5.0  | 15.0 | 60           | 180           | 400   | 0.6       | FXM27K154E142EL5 |
| 275 | 560 | 0.18      | 18.0       | 11.0 | 5.0  | 15.0 | 72           | 216           | 400   | 0.6       | FXM27K184E142EL5 |
| 275 | 560 | 0.2       | 18.0       | 11.0 | 5.0  | 15.0 | 80           | 240           | 400   | 0.6       | FXM27K204E142EL5 |
| 275 | 560 | 0.22      | 18.0       | 11.0 | 5.0  | 15.0 | 88           | 264           | 400   | 0.6       | FXM27K224E142EL5 |
| 275 | 560 | 0.27      | 18.0       | 11.0 | 5.0  | 15.0 | 108          | 324           | 400   | 0.6       | FXM27K274E142EL5 |
| 275 | 560 | 0.3       | 18.0       | 12.0 | 6.0  | 15.0 | 120          | 360           | 400   | 0.6       | FXM27K304E172EL5 |
| 275 | 560 | 0.33      | 18.0       | 12.0 | 6.0  | 15.0 | 132          | 396           | 400   | 0.6       | FXM27K334E172EL5 |
| 275 | 560 | 0.39      | 18.0       | 13.5 | 6.0  | 15.0 | 156          | 468           | 400   | 0.6       | FXM27K394E182EL5 |
| 275 | 560 | 0.47      | 18.0       | 13.0 | 7.0  | 15.0 | 188          | 564           | 400   | 0.8       | FXM27K474E212EL5 |
| 275 | 560 | 0.56      | 18.0       | 14.0 | 8.0  | 15.0 | 224          | 672           | 400   | 0.8       | FXM27K564E312EL5 |
| 275 | 560 | 0.68      | 18.0       | 16.0 | 8.0  | 15.0 | 272          | 816           | 400   | 0.8       | FXM27K684E332EL5 |
| 275 | 560 | 0.82      | 18.0       | 16.0 | 10.0 | 15.0 | 328          | 984           | 400   | 0.8       | FXM27K824E432EL5 |
| 275 | 560 | 1.0       | 18.0       | 18.0 | 10.0 | 15.0 | 400          | 1200          | 400   | 0.8       | FXM27K105E452EL5 |
| 275 | 560 | 1.2       | 18.0       | 19.0 | 11.0 | 15.0 | 480          | 1440          | 400   | 0.8       | FXM27K125E472EL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 10.0  | C13       | 13        | 11   | 5   | 1,200              | 1,488       | 680       |
|       | C16       | 13        | 12   | 6   | 1,200              | 1,224       | 560       |
|       | C24       | 13        | 13   | 7   | 1,200              | 1,056       | 480       |
|       | C25       | 13        | 14   | 7   | 1,200              | 1,056       | 480       |
|       | C27       | 13        | 16   | 8   | 1,200              | 912         | 410       |
|       | C28       | 13        | 17   | 8   | 1,200              | 912         | 410       |
|       | C29       | 13        | 19   | 8   | 1,200              | 912         | 410       |
| 12.5  | D10       | 15        | 11.5 | 6   | 1,000              | 1,071       | 560       |
|       | D11       | 15        | 12.5 | 6.5 | 1,000              | 987         | 510       |
|       | D14       | 15        | 13.5 | 7   | 1,000              | 924         | 480       |
|       | D16       | 15        | 14   | 8.5 | 1,000              | 756         | 390       |
|       | D19       | 15        | 15.5 | 10  | 1,000              | 651         | 340       |
|       | D20       | 15        | 16   | 10  | 1,000              | 651         | 340       |
| 15.0  | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E18       | 18        | 13.5 | 6   | 800                | 867         | 560       |
|       | E21       | 18        | 13   | 7   | 800                | 748         | 480       |
|       | E31       | 18        | 14   | 8   | 600                | 646         | 410       |
|       | E33       | 18        | 16   | 8   | 600                | 646         | 410       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E45       | 18        | 18   | 10  | 600                | 527         | 330       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |

## Overview

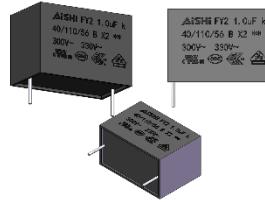
The FY2 series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0.

## Applications

Use in EMI filter in line-to-ground and line-by-pass applications requiring Y2 safety classification. Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.

## Features

- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin

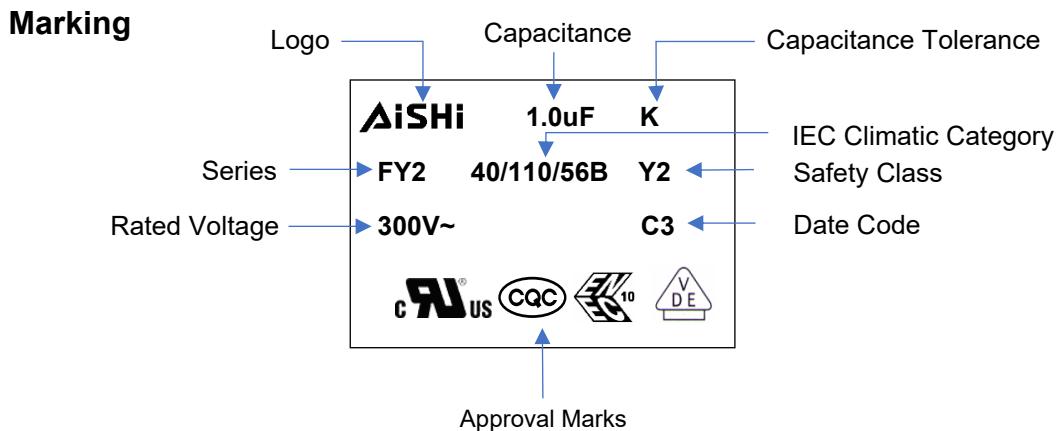


## Applicable Standard

| Approval | Standard   | File Number    |
|----------|--|----------------|
|          | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538        |
|          | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40052687       |
|          | IEC 60384-14:2013+AMD1:2016<br>CQC11-471112-2015 | CQC20001280148 |

## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 300Vac   |
| Capacitance Range           | 0.001µF to 1.0µF   |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |
| Climatic Category           | 40/110/56 IEC60068-1   |
| Dissipation Factor          | 0.0020 (0.2%) at 20°C, 1KHz  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 5000 MΩ·µF |



### Part Number System

| F              | Y2                                 | 30            | K                               | 105   | K24                      | 2KL                          | 5                          |
|----------------|------------------------------------|---------------|---------------------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series                             | Voltage (VAC) | Tolerance                       | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | Class Y2,<br>Metallized<br>PP Film | 30=300Vac     | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

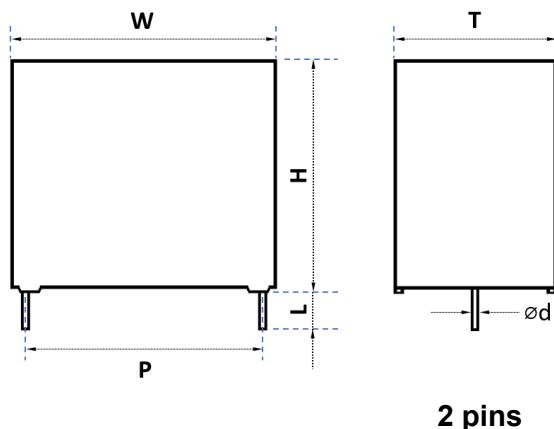
### Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 10.0mm                    | C | 5.1mm                             | A |
| 2 leads for straight cut          | 2 | 15.0mm                    | E | 7.5mm                             | C |
| 2 leads for forming cut           | E | 22.5mm                    | F | 10.2mm                            | B |
| 4 leads for straight cut          | 4 | 27.5mm                    | G | 12.7mm                            | G |
| Taping                            | T | 37.5mm                    | K | 20.3mm                            | D |
| Taping Straight                   | V | N/A                       | N | N/A                               | L |

### Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

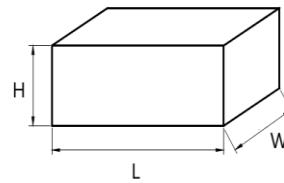
| Size Code | Dimension |           |      |           |     |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|-----|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T   | Tolerance | P     | Tolerance | Ød        | Tolerance |
| C11       | 13        | 0.5       | 9    | 0.5       | 4   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C13       | 13        | 0.5       | 11   | 0.5       | 5   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C16       | 13        | 0.5       | 12   | 0.5       | 6   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| E14       | 18        | 0.5       | 11   | 0.5       | 5   | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E17       | 18        | 0.5       | 12   | 0.5       | 6   | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E29       | 18        | 0.5       | 13.5 | 0.5       | 7.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E34       | 18        | 0.5       | 14.5 | 0.5       | 8.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E47       | 18        | 0.5       | 19   | 0.5       | 11  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| F14       | 26        | 0.5       | 15.5 | 0.5       | 6   | 0.5       | 22.5  | 0.5       | 0.6       | 0.05      |
| F17       | 26        | 0.5       | 16.5 | 0.5       | 7   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F20       | 26        | 0.5       | 17   | 0.5       | 8.5 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F24       | 26        | 0.5       | 19   | 0.5       | 10  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F27       | 26        | 0.5       | 22   | 0.5       | 12  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F36       | 26        | 0.5       | 25   | 0.5       | 15  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| G15       | 32        | 0.8       | 18   | 0.8       | 9   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G33       | 32        | 0.8       | 28   | 0.8       | 18  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| K11       | 42        | 1.0       | 24   | 1.0       | 13  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K17       | 42        | 1.0       | 28   | 1.0       | 17  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K24       | 42        | 1.0       | 40   | 1.0       | 20  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |

### Rating and Part Number

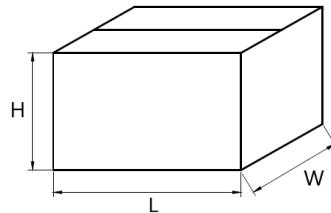
| Vac | Vdc  | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 300 | 1500 | 0.001     | 13         | 9       | 4       | 10      | 0.8          | 2.4           | 800   | 0.6       | FY230K102C112CL5 |
| 300 | 1500 | 0.0015    | 13         | 9       | 4       | 10      | 1.2          | 3.6           | 800   | 0.6       | FY230K152C112CL5 |
| 300 | 1500 | 0.0022    | 13         | 9       | 4       | 10      | 1.76         | 5.28          | 800   | 0.6       | FY230K222C112CL5 |
| 300 | 1500 | 0.0033    | 13         | 11      | 5       | 10      | 2.64         | 7.92          | 800   | 0.6       | FY230K332C132CL5 |
| 300 | 1500 | 0.0047    | 13         | 11      | 5       | 10      | 3.76         | 11.28         | 800   | 0.6       | FY230K472C132CL5 |
| 300 | 1500 | 0.0047    | 13         | 12      | 6       | 10      | 3.76         | 11.28         | 800   | 0.6       | FY230K472C162CL5 |
| 300 | 1500 | 0.0068    | 13         | 12      | 6       | 10      | 5.44         | 16.32         | 800   | 0.6       | FY230K682C162CL5 |
| 300 | 1500 | 0.01      | 13         | 12      | 6       | 10      | 8            | 24            | 800   | 0.6       | FY230K103C162CL5 |
| 300 | 1500 | 0.015     | 13         | 12      | 6       | 10      | 12           | 36            | 800   | 0.6       | FY230K153C162CL5 |
| 300 | 1500 | 0.0047    | 18         | 11      | 5       | 15      | 2.82         | 8.46          | 600   | 0.6       | FY230K472E142EL5 |
| 300 | 1500 | 0.0056    | 18         | 11      | 5       | 15      | 3.36         | 10.08         | 600   | 0.6       | FY230K562E142EL5 |
| 300 | 1500 | 0.0068    | 18         | 11      | 5       | 15      | 4.08         | 12.24         | 600   | 0.6       | FY230K682E142EL5 |
| 300 | 1500 | 0.0082    | 18         | 11      | 5       | 15      | 4.92         | 14.76         | 600   | 0.6       | FY230K822E142EL5 |
| 300 | 1500 | 0.01      | 18         | 11      | 5       | 15      | 6            | 18            | 600   | 0.6       | FY230K103E142EL5 |
| 300 | 1500 | 0.015     | 18         | 11      | 5       | 15      | 9            | 27            | 600   | 0.6       | FY230K153E142EL5 |
| 300 | 1500 | 0.018     | 18         | 12      | 6       | 15      | 10.8         | 32.4          | 600   | 0.6       | FY230K183E172EL5 |
| 300 | 1500 | 0.022     | 18         | 12      | 6       | 15      | 13.2         | 39.6          | 600   | 0.6       | FY230K223E172EL5 |
| 300 | 1500 | 0.033     | 18         | 13.5    | 7.5     | 15      | 19.8         | 59.4          | 600   | 0.8       | FY230K333E292EL5 |
| 300 | 1500 | 0.039     | 18         | 13.5    | 7.5     | 15      | 23.4         | 70.2          | 600   | 0.8       | FY230K393E292EL5 |
| 300 | 1500 | 0.047     | 18         | 14.5    | 8.5     | 15      | 28.2         | 84.6          | 600   | 0.8       | FY230K473E342EL5 |
| 300 | 1500 | 0.068     | 18         | 19      | 11      | 15      | 40.8         | 122.4         | 600   | 0.8       | FY230K683E472EL5 |
| 300 | 1500 | 0.082     | 18         | 19      | 11      | 15      | 49.2         | 147.6         | 600   | 0.8       | FY230K823E472EL5 |
| 300 | 1500 | 0.047     | 26         | 15.5    | 6       | 22.5    | 23.5         | 70.5          | 500   | 0.6       | FY230K473F142FL5 |
| 300 | 1500 | 0.056     | 26         | 15.5    | 6       | 22.5    | 28           | 84            | 500   | 0.6       | FY230K563F142FL5 |
| 300 | 1500 | 0.068     | 26         | 16.5    | 7       | 22.5    | 34           | 102           | 500   | 0.8       | FY230K683F172FL5 |
| 300 | 1500 | 0.082     | 26         | 16.5    | 7       | 22.5    | 41           | 123           | 500   | 0.8       | FY230K823F172FL5 |
| 300 | 1500 | 0.1       | 26         | 17      | 8.5     | 22.5    | 50           | 150           | 500   | 0.8       | FY230K104F202FL5 |
| 300 | 1500 | 0.15      | 26         | 19      | 10      | 22.5    | 75           | 225           | 500   | 0.8       | FY230K154F242FL5 |
| 300 | 1500 | 0.22      | 26         | 22      | 12      | 22.5    | 110          | 330           | 500   | 0.8       | FY230K224F272FL5 |
| 300 | 1500 | 0.33      | 26         | 25      | 15      | 22.5    | 165          | 495           | 500   | 0.8       | FY230K334F362FL5 |
| 300 | 1500 | 0.1       | 32         | 18      | 9       | 27.5    | 40           | 120           | 400   | 0.8       | FY230K104G152GL5 |
| 300 | 1500 | 0.15      | 32         | 18      | 9       | 27.5    | 60           | 180           | 400   | 0.8       | FY230K154G152GL5 |
| 300 | 1500 | 0.18      | 32         | 20      | 11      | 27.5    | 72           | 216           | 400   | 0.8       | FY230K184G182GL5 |
| 300 | 1500 | 0.22      | 32         | 20      | 11      | 27.5    | 88           | 264           | 400   | 0.8       | FY230K224G182GL5 |
| 300 | 1500 | 0.27      | 32         | 22      | 13      | 27.5    | 108          | 324           | 400   | 0.8       | FY230K274G212GL5 |
| 300 | 1500 | 0.33      | 32         | 28      | 14      | 27.5    | 132          | 396           | 400   | 0.8       | FY230K334G262GL5 |
| 300 | 1500 | 0.33      | 32         | 22      | 13      | 27.5    | 132          | 396           | 400   | 0.8       | FY230M334G212GL5 |
| 300 | 1500 | 0.47      | 32         | 28      | 18      | 27.5    | 188          | 564           | 400   | 0.8       | FY230K474G332GL5 |
| 300 | 1500 | 0.56      | 32         | 33      | 18      | 27.5    | 224          | 672           | 400   | 0.8       | FY230K564G342GL5 |
| 300 | 1500 | 0.68      | 32         | 33      | 18      | 27.5    | 272          | 816           | 400   | 0.8       | FY230K684G342GL5 |
| 300 | 1500 | 0.82      | 32         | 37      | 22      | 27.5    | 328          | 984           | 400   | 0.8       | FY230K824G402GL5 |
| 300 | 1500 | 1         | 32         | 37      | 22      | 27.5    | 400          | 1200          | 400   | 0.8       | FY230K105G402GL5 |
| 300 | 1500 | 0.47      | 42         | 24      | 13      | 37.5    | 141          | 423           | 300   | 1.0       | FY230K474K112KL5 |
| 300 | 1500 | 0.68      | 42         | 28      | 17      | 37.5    | 204          | 612           | 300   | 1.0       | FY230K684K172KL5 |
| 300 | 1500 | 0.82      | 42         | 32      | 19      | 37.5    | 246          | 738           | 300   | 1.0       | FY230K824K212KL5 |
| 300 | 1500 | 1         | 42         | 40      | 20      | 37.5    | 300          | 900           | 300   | 1.0       | FY230K105K242KL5 |

## Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



## Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 10    | C11       | 13        | 9    | 4   | 1,200              | 1,848       | 840       |
|       | C13       | 13        | 11   | 5   | 1,200              | 1,488       | 680       |
|       | C16       | 13        | 12   | 6   | 1,200              | 1,224       | 560       |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F14       | 26        | 15.5 | 6   |                    | 612         | 350       |
|       | F17       | 26        | 16.5 | 7   |                    | 528         | 300       |
|       | F20       | 26        | 17   | 8.5 |                    | 432         | 250       |
|       | F24       | 26        | 19   | 10  |                    | 372         | 210       |
|       | F27       | 26        | 22   | 12  |                    | 300         | 170       |
|       | F36       | 26        | 25   | 15  |                    | 240         | 140       |
| 27.5  | G15       | 32        | 18   | 9   |                    | 340         | 230       |
|       | G18       | 32        | 20   | 11  |                    | 280         | 190       |
|       | G21       | 32        | 22   | 13  |                    | 230         | 160       |
|       | G26       | 32        | 28   | 14  |                    | 220         | 150       |
|       | G33       | 32        | 28   | 18  |                    | 170         | 110       |
|       | G34       | 32        | 33   | 18  |                    | 170         | 110       |
|       | G40       | 32        | 37   | 22  |                    | 140         | 90        |
| 37.5  | K11       | 42        | 24   | 13  |                    | 161         |           |
|       | K17       | 42        | 28   | 17  |                    | 126         |           |
|       | K21       | 42        | 32   | 19  |                    | 112         |           |
|       | K24       | 42        | 40   | 20  |                    | 105         |           |

## Overview

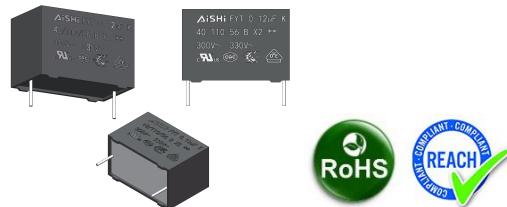
The FYT series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0. This FYT series robustness design is suitable for high humidity and high temperature environmental and compliant to THB Grade IIIB.

## Applications

Use in EMI filter in line-to-ground and line-by-pass applications requiring Y2 safety classification. Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.

## Features

- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Suitable for harsh environment conditions
- THB Grade IIIB (85°C, 85% RH, 1000h at U<sub>RAC</sub>)



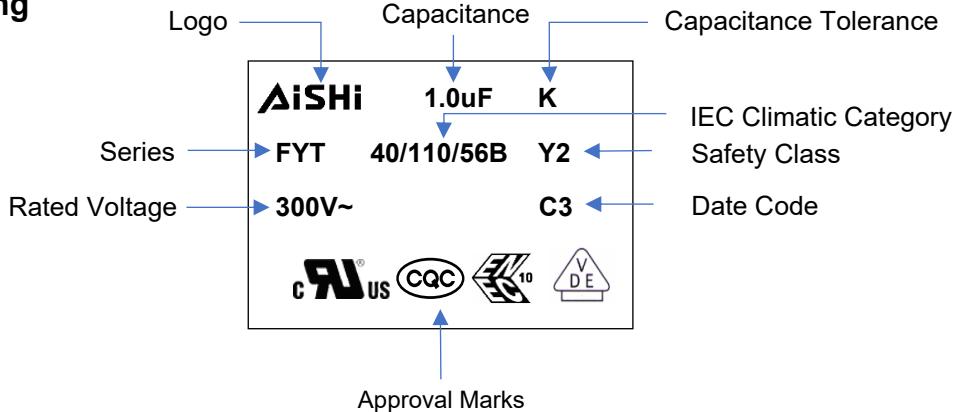
## Applicable Standard

| Approval | Standard   | File Number    |
|----------|--|----------------|
|          | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538        |
|          | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40052687       |
|          | IEC 60384-14:2013+AMD1:2016<br>CQC11-471112-2015 | CQC20001280148 |

## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 300Vac   |
| Capacitance Range           | 0.001µF to 1.0µF   |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |
| Climatic Category           | 40/110/56 IEC60068-1   |
| Dissipation Factor          | 0.0020 (0.2%) at 20°C, 1KHz  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 5000 MΩ*µF |

### Marking



### Part Number System

| F              | YT                                     | 30            | K                               | 105   | K24                      | 2KL                          | 5                          |
|----------------|--|---------------|---------------------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series                                 | Voltage (VAC) | Tolerance                       | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | Class Y2, THB Type, Metallized PP Film | 30=300Vac     | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

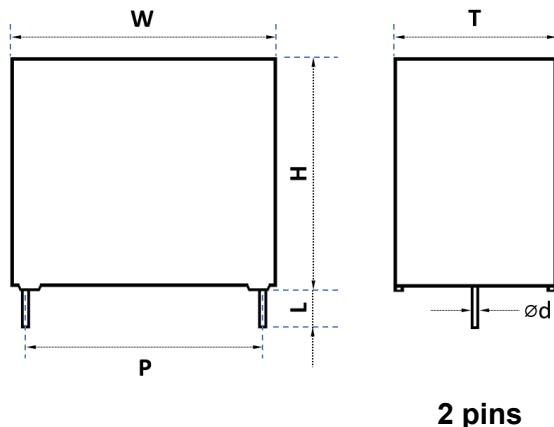
### Terminal Code

| Digit One (Lead/Terminal Type) |   | Digit Two (Lead Space) |   | Digit Three (Lead Ipsilateral) |   |
|--------------------------------|---|------------------------|---|--------------------------------|---|
| 2 leads for long               | L | 10.0mm                 | C | 5.1mm                          | A |
| 2 leads for straight cut       | 2 | 15.0mm                 | E | 7.5mm                          | C |
| 2 leads for forming cut        | E | 22.5mm                 | F | 10.2mm                         | B |
| 4 leads for straight cut       | 4 | 27.5mm                 | G | 12.7mm                         | G |
| Taping                         | T | 37.5mm                 | K | 20.3mm                         | D |
| Taping Straight                | V | N/A                    | N | N/A                            | L |

### Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

**Dimension (mm)**



**Size Code Table (mm)**

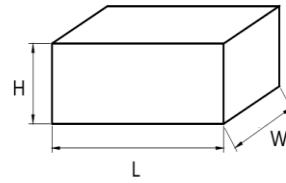
| Size Code | Dimension |           |      |           |     |           | Pitch |           | Lead Wire       |           |
|-----------|-----------|-----------|------|-----------|-----|-----------|-------|-----------|-----------------|-----------|
|           | W         | Tolerance | H    | Tolerance | T   | Tolerance | P     | Tolerance | $\varnothing d$ | Tolerance |
| C11       | 13        | 0.5       | 9    | 0.5       | 4   | 0.5       | 10    | 0.5       | 0.6             | 0.05      |
| C13       | 13        | 0.5       | 11   | 0.5       | 5   | 0.5       | 10    | 0.5       | 0.6             | 0.05      |
| C16       | 13        | 0.5       | 12   | 0.5       | 6   | 0.5       | 10    | 0.5       | 0.6             | 0.05      |
| E14       | 18        | 0.5       | 11   | 0.5       | 5   | 0.5       | 15    | 0.5       | 0.6             | 0.05      |
| E17       | 18        | 0.5       | 12   | 0.5       | 6   | 0.5       | 15    | 0.5       | 0.6             | 0.05      |
| E29       | 18        | 0.5       | 13.5 | 0.5       | 7.5 | 0.5       | 15    | 0.5       | 0.8             | 0.05      |
| E34       | 18        | 0.5       | 14.5 | 0.5       | 8.5 | 0.5       | 15    | 0.5       | 0.8             | 0.05      |
| E47       | 18        | 0.5       | 19   | 0.5       | 11  | 0.5       | 15    | 0.5       | 0.8             | 0.05      |
| F14       | 26        | 0.5       | 15.5 | 0.5       | 6   | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F17       | 26        | 0.5       | 16.5 | 0.5       | 7   | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F20       | 26        | 0.5       | 17   | 0.5       | 8.5 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F24       | 26        | 0.5       | 19   | 0.5       | 10  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F27       | 26        | 0.5       | 22   | 0.5       | 12  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F36       | 26        | 0.5       | 25   | 0.5       | 15  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| G15       | 32        | 0.8       | 18   | 0.8       | 9   | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11  | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14  | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G33       | 32        | 0.8       | 28   | 0.8       | 18  | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18  | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22  | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| K11       | 42        | 1.0       | 24   | 1.0       | 13  | 1.0       | 37.5  | 0.5       | 1.0             | 0.05      |
| K17       | 42        | 1.0       | 28   | 1.0       | 17  | 1.0       | 37.5  | 0.5       | 1.0             | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19  | 1.0       | 37.5  | 0.5       | 1.0             | 0.05      |
| K24       | 42        | 1.0       | 40   | 1.0       | 20  | 1.0       | 37.5  | 0.5       | 1.2             | 0.05      |

### Rating and Part Number

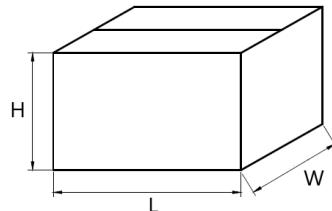
| Vac | Vdc  | Cap Value<br>μF | Dimensions |         |         |         | Peak Current<br>A | Surge Current<br>A | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|------|-----------------|------------|---------|---------|---------|-------------------|--------------------|---------------|-----------------|------------------|
|     |      |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm |                   |                    |               |                 |                  |
| 300 | 1500 | 0.001           | 13         | 9       | 4       | 10      | 0.8               | 2.4                | 800           | 0.6             | FYT30K102C112CL5 |
| 300 | 1500 | 0.0015          | 13         | 9       | 4       | 10      | 1.2               | 3.6                | 800           | 0.6             | FYT30K152C112CL5 |
| 300 | 1500 | 0.0022          | 13         | 9       | 4       | 10      | 1.76              | 5.28               | 800           | 0.6             | FYT30K222C112CL5 |
| 300 | 1500 | 0.0033          | 13         | 11      | 5       | 10      | 2.64              | 7.92               | 800           | 0.6             | FYT30K332C132CL5 |
| 300 | 1500 | 0.0047          | 13         | 11      | 5       | 10      | 3.76              | 11.28              | 800           | 0.6             | FYT30K472C132CL5 |
| 300 | 1500 | 0.0047          | 13         | 12      | 6       | 10      | 3.76              | 11.28              | 800           | 0.6             | FYT30K472C162CL5 |
| 300 | 1500 | 0.0068          | 13         | 12      | 6       | 10      | 5.44              | 16.32              | 800           | 0.6             | FYT30K682C162CL5 |
| 300 | 1500 | 0.01            | 13         | 12      | 6       | 10      | 8                 | 24                 | 800           | 0.6             | FYT30K103C162CL5 |
| 300 | 1500 | 0.015           | 13         | 12      | 6       | 10      | 12                | 36                 | 800           | 0.6             | FYT30K153C162CL5 |
| 300 | 1500 | 0.0047          | 18         | 11      | 5       | 15      | 2.82              | 8.46               | 600           | 0.6             | FYT30K472E142EL5 |
| 300 | 1500 | 0.0056          | 18         | 11      | 5       | 15      | 3.36              | 10.08              | 600           | 0.6             | FYT30K562E142EL5 |
| 300 | 1500 | 0.0068          | 18         | 11      | 5       | 15      | 4.08              | 12.24              | 600           | 0.6             | FYT30K682E142EL5 |
| 300 | 1500 | 0.0082          | 18         | 11      | 5       | 15      | 4.92              | 14.76              | 600           | 0.6             | FYT30K822E142EL5 |
| 300 | 1500 | 0.01            | 18         | 11      | 5       | 15      | 6                 | 18                 | 600           | 0.6             | FYT30K103E142EL5 |
| 300 | 1500 | 0.015           | 18         | 11      | 5       | 15      | 9                 | 27                 | 600           | 0.6             | FYT30K153E142EL5 |
| 300 | 1500 | 0.018           | 18         | 12      | 6       | 15      | 10.8              | 32.4               | 600           | 0.6             | FYT30K183E172EL5 |
| 300 | 1500 | 0.022           | 18         | 12      | 6       | 15      | 13.2              | 39.6               | 600           | 0.6             | FYT30K223E172EL5 |
| 300 | 1500 | 0.033           | 18         | 13.5    | 7.5     | 15      | 19.8              | 59.4               | 600           | 0.8             | FYT30K333E292EL5 |
| 300 | 1500 | 0.039           | 18         | 13.5    | 7.5     | 15      | 23.4              | 70.2               | 600           | 0.8             | FYT30K393E292EL5 |
| 300 | 1500 | 0.047           | 18         | 14.5    | 8.5     | 15      | 28.2              | 84.6               | 600           | 0.8             | FYT30K473E342EL5 |
| 300 | 1500 | 0.068           | 18         | 19      | 11      | 15      | 40.8              | 122.4              | 600           | 0.8             | FYT30K683E472EL5 |
| 300 | 1500 | 0.082           | 18         | 19      | 11      | 15      | 49.2              | 147.6              | 600           | 0.8             | FYT30K823E472EL5 |
| 300 | 1500 | 0.047           | 26         | 15.5    | 6       | 22.5    | 23.5              | 70.5               | 500           | 0.6             | FYT30K473F142FL5 |
| 300 | 1500 | 0.056           | 26         | 15.5    | 6       | 22.5    | 28                | 84                 | 500           | 0.6             | FYT30K563F142FL5 |
| 300 | 1500 | 0.068           | 26         | 16.5    | 7       | 22.5    | 34                | 102                | 500           | 0.8             | FYT30K683F172FL5 |
| 300 | 1500 | 0.082           | 26         | 16.5    | 7       | 22.5    | 41                | 123                | 500           | 0.8             | FYT30K823F172FL5 |
| 300 | 1500 | 0.1             | 26         | 17      | 8.5     | 22.5    | 50                | 150                | 500           | 0.8             | FYT30K104F202FL5 |
| 300 | 1500 | 0.15            | 26         | 19      | 10      | 22.5    | 75                | 225                | 500           | 0.8             | FYT30K154F242FL5 |
| 300 | 1500 | 0.22            | 26         | 22      | 12      | 22.5    | 110               | 330                | 500           | 0.8             | FYT30K224F272FL5 |
| 300 | 1500 | 0.33            | 26         | 25      | 15      | 22.5    | 165               | 495                | 500           | 0.8             | FYT30K334F362FL5 |
| 300 | 1500 | 0.1             | 32         | 18      | 9       | 27.5    | 40                | 120                | 400           | 0.8             | FYT30K104G152GL5 |
| 300 | 1500 | 0.15            | 32         | 18      | 9       | 27.5    | 60                | 180                | 400           | 0.8             | FYT30K154G152GL5 |
| 300 | 1500 | 0.18            | 32         | 20      | 11      | 27.5    | 72                | 216                | 400           | 0.8             | FYT30K184G182GL5 |
| 300 | 1500 | 0.22            | 32         | 20      | 11      | 27.5    | 88                | 264                | 400           | 0.8             | FYT30K224G182GL5 |
| 300 | 1500 | 0.27            | 32         | 22      | 13      | 27.5    | 108               | 324                | 400           | 0.8             | FYT30K274G212GL5 |
| 300 | 1500 | 0.33            | 32         | 28      | 14      | 27.5    | 132               | 396                | 400           | 0.8             | FYT30K334G262GL5 |
| 300 | 1500 | 0.33            | 32         | 22      | 13      | 27.5    | 132               | 396                | 400           | 0.8             | FYT30M334G212GL5 |
| 300 | 1500 | 0.47            | 32         | 28      | 18      | 27.5    | 188               | 564                | 400           | 0.8             | FYT30K474G332GL5 |
| 300 | 1500 | 0.56            | 32         | 33      | 18      | 27.5    | 224               | 672                | 400           | 0.8             | FYT30K564G342GL5 |
| 300 | 1500 | 0.68            | 32         | 33      | 18      | 27.5    | 272               | 816                | 400           | 0.8             | FYT30K684G342GL5 |
| 300 | 1500 | 0.82            | 32         | 37      | 22      | 27.5    | 328               | 984                | 400           | 0.8             | FYT30K824G402GL5 |
| 300 | 1500 | 1               | 32         | 37      | 22      | 27.5    | 400               | 1200               | 400           | 0.8             | FYT30K105G402GL5 |
| 300 | 1500 | 0.47            | 42         | 24      | 13      | 37.5    | 141               | 423                | 300           | 1.0             | FYT30K474K112KL5 |
| 300 | 1500 | 0.68            | 42         | 28      | 17      | 37.5    | 204               | 612                | 300           | 1.0             | FYT30K684K172KL5 |
| 300 | 1500 | 0.82            | 42         | 32      | 19      | 37.5    | 246               | 738                | 300           | 1.0             | FYT30K824K212KL5 |
| 300 | 1500 | 1               | 42         | 40      | 20      | 37.5    | 300               | 900                | 300           | 1.0             | FYT30K105K242KL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 10    | C11       | 13        | 9    | 4   | 1,200              | 1,848       | 840       |
|       | C13       | 13        | 11   | 5   | 1,200              | 1,488       | 680       |
|       | C16       | 13        | 12   | 6   | 1,200              | 1,224       | 560       |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F14       | 26        | 15.5 | 6   |                    | 612         | 350       |
|       | F17       | 26        | 16.5 | 7   |                    | 528         | 300       |
|       | F20       | 26        | 17   | 8.5 |                    | 432         | 250       |
|       | F24       | 26        | 19   | 10  |                    | 372         | 210       |
|       | F27       | 26        | 22   | 12  |                    | 300         | 170       |
|       | F36       | 26        | 25   | 15  |                    | 240         | 140       |
| 27.5  | G15       | 32        | 18   | 9   |                    | 340         | 230       |
|       | G18       | 32        | 20   | 11  |                    | 280         | 190       |
|       | G21       | 32        | 22   | 13  |                    | 230         | 160       |
|       | G26       | 32        | 28   | 14  |                    | 220         | 150       |
|       | G33       | 32        | 28   | 18  |                    | 170         | 110       |
|       | G34       | 32        | 33   | 18  |                    | 170         | 110       |
|       | G40       | 32        | 37   | 22  |                    | 140         | 90        |
| 37.5  | K11       | 42        | 24   | 13  |                    | 161         |           |
|       | K17       | 42        | 28   | 17  |                    | 126         |           |
|       | K21       | 42        | 32   | 19  |                    | 112         |           |
|       | K24       | 42        | 40   | 20  |                    | 105         |           |

## Overview

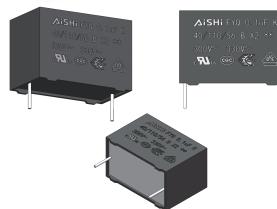
The FYQ series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0. This FYQ series robustness design is suitable for harsh environmental, qualify in accordance to AEC-Q200 requirement.

## Applications

Use in EMI filter in line-to-ground and line-by-pass applications requiring Y2 safety classification. Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.

## Features

- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Suitable for harsh environment conditions
- THB Grade IIIB (85°C, 85% RH, 1000h at  $U_{RAC}$ )
- Automotive Grade (AEC-Q200D)

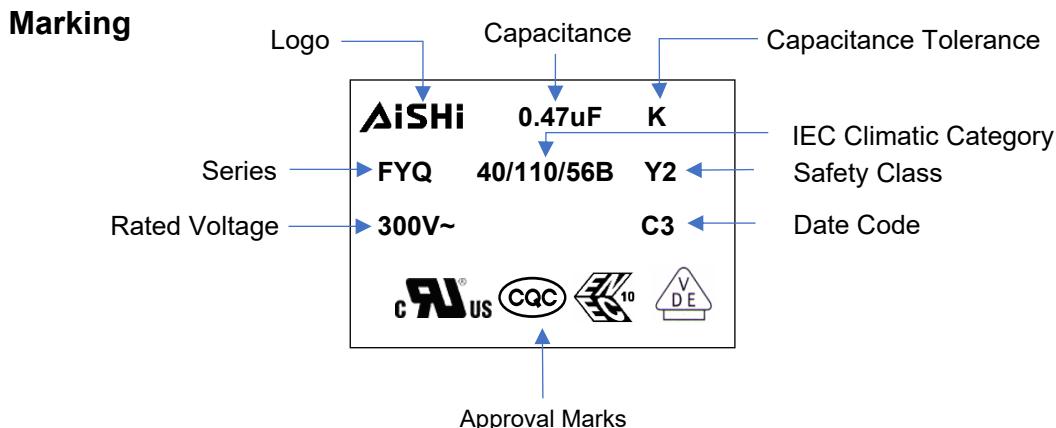


## Applicable Standard

| Approval | Standard   | File Number    |
|----------|--|----------------|
|          | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538        |
|          | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40052687       |
|          | IEC 60384-14:2013+AMD1:2016<br>CQC11-471112-2015 | CQC20001280148 |

## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 300Vac   |
| Capacitance Range           | 0.001µF to 1.0µF   |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |
| Climatic Category           | 40/110/56 IEC60068-1   |
| Dissipation Factor          | 0.0020 (0.2%) at 20°C, 1KHz  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 5000 MΩ*µF |



### Part Number System

| F              | YQ  | 30            | K                    | 474   | G33                            | 2GL                                | 5                             |
|----------------|---|---------------|----------------------|---|--------------------------------|------------------------------------|-------------------------------|
| Capacitor Type | Series  | Voltage (VAC) | Tolerance            | Capacitance (pF)  | Size Code                      | Terminal Code                      | Lead Length Code              |
| F = Film       | Class Y2,<br>AEC-Q200<br>Type,<br>Metallized<br>PP Film | 30=300        | K = ±10%<br>M = ±20% | First two digits =<br>significant figures.<br>Third digit =<br>Number of zeros. | Refer to<br>Size Code<br>Table | Refer to<br>Terminal<br>Code Table | Refer to Lead<br>Length Table |

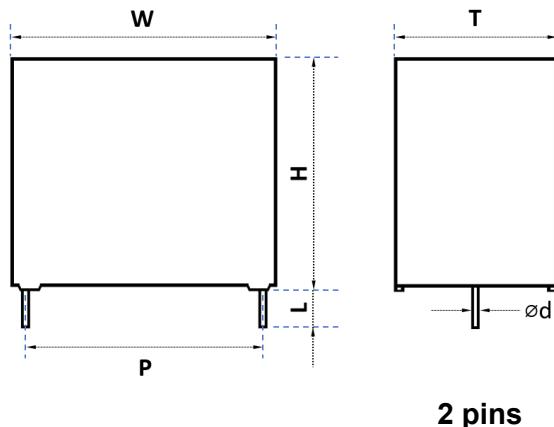
### Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 10.0mm                    | C | 5.1mm                             | A |
| 2 leads for straight cut          | 2 | 15.0mm                    | E | 7.5mm                             | C |
| 2 leads for forming cut           | E | 22.5mm                    | F | 10.2mm                            | B |
| 4 leads for straight cut          | 4 | 27.5mm                    | G | 12.7mm                            | G |
| Taping                            | T | 37.5mm                    | K | 20.3mm                            | D |
| Taping Straight                   | V | N/A                       | N | N/A                               | L |

### Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

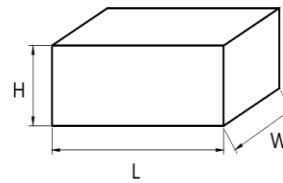
| Size Code | Dimension |           |      |           |     |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|-----|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T   | Tolerance | P     | Tolerance | Ød        | Tolerance |
| C11       | 13        | 0.5       | 9    | 0.5       | 4   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C13       | 13        | 0.5       | 11   | 0.5       | 5   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C16       | 13        | 0.5       | 12   | 0.5       | 6   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| E14       | 18        | 0.5       | 11   | 0.5       | 5   | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E17       | 18        | 0.5       | 12   | 0.5       | 6   | 0.5       | 15    | 0.5       | 0.6       | 0.05      |
| E29       | 18        | 0.5       | 13.5 | 0.5       | 7.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E34       | 18        | 0.5       | 14.5 | 0.5       | 8.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E47       | 18        | 0.5       | 19   | 0.5       | 11  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| F14       | 26        | 0.5       | 15.5 | 0.5       | 6   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F17       | 26        | 0.5       | 16.5 | 0.5       | 7   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F20       | 26        | 0.5       | 17   | 0.5       | 8.5 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F24       | 26        | 0.5       | 19   | 0.5       | 10  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F27       | 26        | 0.5       | 22   | 0.5       | 12  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F36       | 26        | 0.5       | 25   | 0.5       | 15  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| G15       | 32        | 0.8       | 18   | 0.8       | 9   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G33       | 32        | 0.8       | 28   | 0.8       | 18  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| K11       | 42        | 1.0       | 24   | 1.0       | 13  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K17       | 42        | 1.0       | 28   | 1.0       | 17  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K24       | 42        | 1.0       | 40   | 1.0       | 20  | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |

### Rating and Part Number

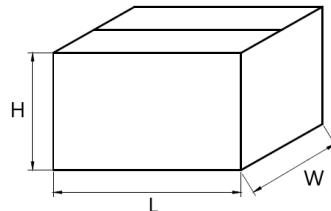
| Vac | Vdc  | Cap Value<br>μF | Dimensions |         |         |         | Peak Current<br>A | Surge Current<br>A | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|------|-----------------|------------|---------|---------|---------|-------------------|--------------------|---------------|-----------------|------------------|
|     |      |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm |                   |                    |               |                 |                  |
| 300 | 1500 | 0.001           | 13         | 9       | 4       | 10      | 0.8               | 2.4                | 800           | 0.6             | FYQ30K102C112CL5 |
| 300 | 1500 | 0.0015          | 13         | 9       | 4       | 10      | 1.2               | 3.6                | 800           | 0.6             | FYQ30K152C112CL5 |
| 300 | 1500 | 0.0022          | 13         | 9       | 4       | 10      | 1.76              | 5.28               | 800           | 0.6             | FYQ30K222C112CL5 |
| 300 | 1500 | 0.0033          | 13         | 11      | 5       | 10      | 2.64              | 7.92               | 800           | 0.6             | FYQ30K332C132CL5 |
| 300 | 1500 | 0.0047          | 13         | 11      | 5       | 10      | 3.76              | 11.28              | 800           | 0.6             | FYQ30K472C132CL5 |
| 300 | 1500 | 0.0047          | 13         | 12      | 6       | 10      | 3.76              | 11.28              | 800           | 0.6             | FYQ30K472C162CL5 |
| 300 | 1500 | 0.0068          | 13         | 12      | 6       | 10      | 5.44              | 16.32              | 800           | 0.6             | FYQ30K682C162CL5 |
| 300 | 1500 | 0.01            | 13         | 12      | 6       | 10      | 8                 | 24                 | 800           | 0.6             | FYQ30K103C162CL5 |
| 300 | 1500 | 0.015           | 13         | 12      | 6       | 10      | 12                | 36                 | 800           | 0.6             | FYQ30K153C162CL5 |
| 300 | 1500 | 0.0047          | 18         | 11      | 5       | 15      | 2.82              | 8.46               | 600           | 0.6             | FYQ30K472E142EL5 |
| 300 | 1500 | 0.0056          | 18         | 11      | 5       | 15      | 3.36              | 10.08              | 600           | 0.6             | FYQ30K562E142EL5 |
| 300 | 1500 | 0.0068          | 18         | 11      | 5       | 15      | 4.08              | 12.24              | 600           | 0.6             | FYQ30K682E142EL5 |
| 300 | 1500 | 0.0082          | 18         | 11      | 5       | 15      | 4.92              | 14.76              | 600           | 0.6             | FYQ30K822E142EL5 |
| 300 | 1500 | 0.01            | 18         | 11      | 5       | 15      | 6                 | 18                 | 600           | 0.6             | FYQ30K103E142EL5 |
| 300 | 1500 | 0.015           | 18         | 11      | 5       | 15      | 9                 | 27                 | 600           | 0.6             | FYQ30K153E142EL5 |
| 300 | 1500 | 0.018           | 18         | 12      | 6       | 15      | 10.8              | 32.4               | 600           | 0.6             | FYQ30K183E172EL5 |
| 300 | 1500 | 0.022           | 18         | 12      | 6       | 15      | 13.2              | 39.6               | 600           | 0.6             | FYQ30K223E172EL5 |
| 300 | 1500 | 0.033           | 18         | 13.5    | 7.5     | 15      | 19.8              | 59.4               | 600           | 0.8             | FYQ30K333E292EL5 |
| 300 | 1500 | 0.039           | 18         | 13.5    | 7.5     | 15      | 23.4              | 70.2               | 600           | 0.8             | FYQ30K393E292EL5 |
| 300 | 1500 | 0.047           | 18         | 14.5    | 8.5     | 15      | 28.2              | 84.6               | 600           | 0.8             | FYQ30K473E342EL5 |
| 300 | 1500 | 0.068           | 18         | 19      | 11      | 15      | 40.8              | 122.4              | 600           | 0.8             | FYQ30K683E472EL5 |
| 300 | 1500 | 0.082           | 18         | 19      | 11      | 15      | 49.2              | 147.6              | 600           | 0.8             | FYQ30K823E472EL5 |
| 300 | 1500 | 0.047           | 26         | 15.5    | 6       | 22.5    | 23.5              | 70.5               | 500           | 0.6             | FYQ30K473F142FL5 |
| 300 | 1500 | 0.056           | 26         | 15.5    | 6       | 22.5    | 28                | 84                 | 500           | 0.6             | FYQ30K563F142FL5 |
| 300 | 1500 | 0.068           | 26         | 16.5    | 7       | 22.5    | 34                | 102                | 500           | 0.8             | FYQ30K683F172FL5 |
| 300 | 1500 | 0.082           | 26         | 16.5    | 7       | 22.5    | 41                | 123                | 500           | 0.8             | FYQ30K823F172FL5 |
| 300 | 1500 | 0.1             | 26         | 17      | 8.5     | 22.5    | 50                | 150                | 500           | 0.8             | FYQ30K104F202FL5 |
| 300 | 1500 | 0.15            | 26         | 19      | 10      | 22.5    | 75                | 225                | 500           | 0.8             | FYQ30K154F242FL5 |
| 300 | 1500 | 0.22            | 26         | 22      | 12      | 22.5    | 110               | 330                | 500           | 0.8             | FYQ30K224F272FL5 |
| 300 | 1500 | 0.33            | 26         | 25      | 15      | 22.5    | 165               | 495                | 500           | 0.8             | FYQ30K334F362FL5 |
| 300 | 1500 | 0.1             | 32         | 18      | 9       | 27.5    | 40                | 120                | 400           | 0.8             | FYQ30K104G152GL5 |
| 300 | 1500 | 0.15            | 32         | 18      | 9       | 27.5    | 60                | 180                | 400           | 0.8             | FYQ30K154G152GL5 |
| 300 | 1500 | 0.18            | 32         | 20      | 11      | 27.5    | 72                | 216                | 400           | 0.8             | FYQ30K184G182GL5 |
| 300 | 1500 | 0.22            | 32         | 20      | 11      | 27.5    | 88                | 264                | 400           | 0.8             | FYQ30K224G182GL5 |
| 300 | 1500 | 0.27            | 32         | 22      | 13      | 27.5    | 108               | 324                | 400           | 0.8             | FYQ30K274G212GL5 |
| 300 | 1500 | 0.33            | 32         | 28      | 14      | 27.5    | 132               | 396                | 400           | 0.8             | FYQ30K334G262GL5 |
| 300 | 1500 | 0.33            | 32         | 22      | 13      | 27.5    | 132               | 396                | 400           | 0.8             | FYQ30M334G212GL5 |
| 300 | 1500 | 0.47            | 32         | 28      | 18      | 27.5    | 188               | 564                | 400           | 0.8             | FYQ30K474G332GL5 |
| 300 | 1500 | 0.56            | 32         | 33      | 18      | 27.5    | 224               | 672                | 400           | 0.8             | FYQ30K564G342GL5 |
| 300 | 1500 | 0.68            | 32         | 33      | 18      | 27.5    | 272               | 816                | 400           | 0.8             | FYQ30K684G342GL5 |
| 300 | 1500 | 0.82            | 32         | 37      | 22      | 27.5    | 328               | 984                | 400           | 0.8             | FYQ30K824G402GL5 |
| 300 | 1500 | 1               | 32         | 37      | 22      | 27.5    | 400               | 1200               | 400           | 0.8             | FYQ30K105G402GL5 |
| 300 | 1500 | 0.47            | 42         | 24      | 13      | 37.5    | 141               | 423                | 300           | 1.0             | FYQ30K474K112KL5 |
| 300 | 1500 | 0.68            | 42         | 28      | 17      | 37.5    | 204               | 612                | 300           | 1.0             | FYQ30K684K172KL5 |
| 300 | 1500 | 0.82            | 42         | 32      | 19      | 37.5    | 246               | 738                | 300           | 1.0             | FYQ30K824K212KL5 |
| 300 | 1500 | 1               | 42         | 40      | 20      | 37.5    | 300               | 900                | 300           | 1.0             | FYQ30K105K242KL5 |

## Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



## Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 10    | C11       | 13        | 9    | 4   | 1,200              | 1,848       | 840       |
|       | C13       | 13        | 11   | 5   | 1,200              | 1,488       | 680       |
|       | C16       | 13        | 12   | 6   | 1,200              | 1,224       | 560       |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F14       | 26        | 15.5 | 6   |                    | 612         | 350       |
|       | F17       | 26        | 16.5 | 7   |                    | 528         | 300       |
|       | F20       | 26        | 17   | 8.5 |                    | 432         | 250       |
|       | F24       | 26        | 19   | 10  |                    | 372         | 210       |
|       | F27       | 26        | 22   | 12  |                    | 300         | 170       |
|       | F36       | 26        | 25   | 15  |                    | 240         | 140       |
| 27.5  | G15       | 32        | 18   | 9   |                    | 340         | 230       |
|       | G18       | 32        | 20   | 11  |                    | 280         | 190       |
|       | G21       | 32        | 22   | 13  |                    | 230         | 160       |
|       | G26       | 32        | 28   | 14  |                    | 220         | 150       |
|       | G33       | 32        | 28   | 18  |                    | 170         | 110       |
|       | G34       | 32        | 33   | 18  |                    | 170         | 110       |
|       | G40       | 32        | 37   | 22  |                    | 140         | 90        |
| 37.5  | K11       | 42        | 24   | 13  |                    | 161         |           |
|       | K17       | 42        | 28   | 17  |                    | 126         |           |
|       | K21       | 42        | 32   | 19  |                    | 112         |           |
|       | K24       | 42        | 40   | 20  |                    | 105         |           |

## Overview

The FX1 series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0.

## Applications

For use as an electromagnetic interference (EMI) suppression filter in across-the-line applications that require X1 safety classification. Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.

## Features

- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin

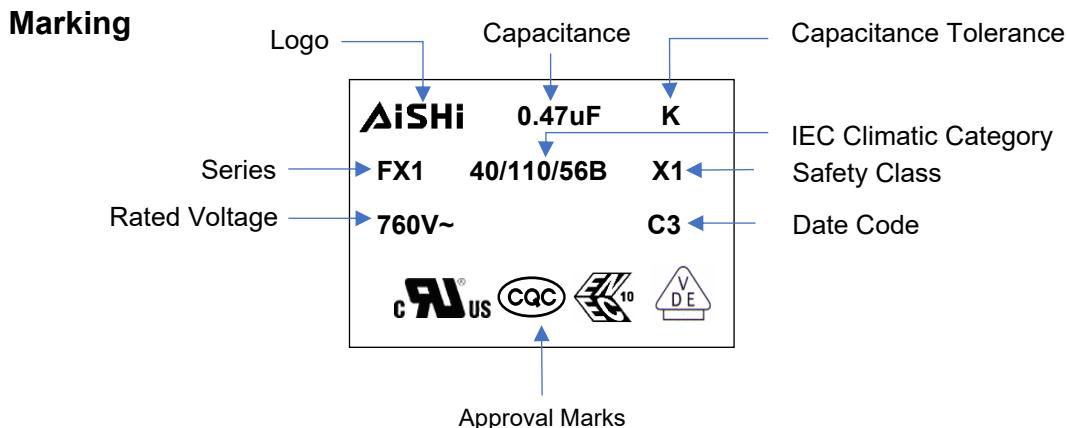


## Applicable Standard

| Approval | Standard   | File Number  |
|----------|--|--|
|          | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538  |
|          | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40052137   |
|          | IEC 60384-14:2013+AMD1:2016<br>CQC11-471112-2015 | CQC20001281016 (350~480Vac)<br>CQC20001281018 (530~760Vac) |

## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 350Vac, 440/480Vac, 530Vac, 760Vac 50/60Hz   |
| Capacitance Range           | 0.0047μF to 5.6μF  |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |
| Climatic Category           | 40/110/56 IEC60068-1   |
| Dissipation Factor          | $\leq 10 \times 10^{-4}$ C < 0.47μF<br>$\leq 20 \times 10^{-4}$ 0.47μF ≤ C ≤ 1.0μF<br>$\leq 30 \times 10^{-4}$ C > 1.0μF       |
| Insulation Resistance       | R between leads, for C ≤ 0.33 μF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 μF at 100 V; 1 min > 5000 MΩ*μF |



### Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

### Part Number System

| F              | X1  | 76   | K                               | 474   | K13                      | 2EL                          | 5                          |
|----------------|---|--|---------------------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series  | Voltage (VAC)  | Tolerance                       | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | Class X1,<br>EMI<br>Capacitor,<br>Metallized<br>PP Film | 35=350<br>44=440<br>48=480<br>53=530<br>60=600<br>76=760 | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

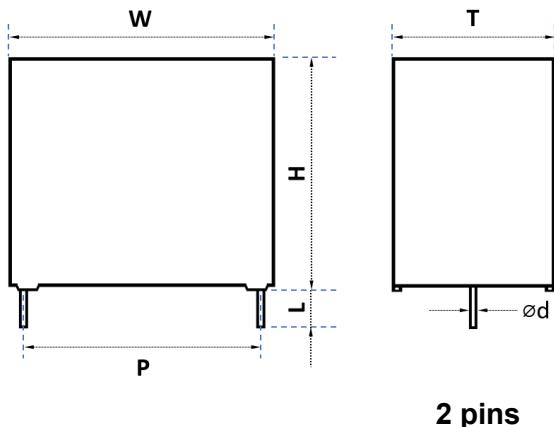
### Terminal Code

| Digit One<br>(Lead/Terminal Type) | Digit Two<br>(Lead Space) | Digit Three<br>(Lead Ipsilateral) |
|-----------------------------------|---------------------------|-----------------------------------|
| 2 leads for long                  | L                         | 10.0mm                            |
| 2 leads for straight cut          | 2                         | 12.5mm                            |
| 2 leads for forming cut           | E                         | 15.0mm                            |
| 4 leads for straight cut          | 4                         | 22.5mm                            |
| Taping                            | T                         | 27.5mm                            |
| Taping Straight                   | V                         | 37.5mm                            |
|                                   |                           | 57.5mm                            |
|                                   |                           | N/A                               |

### Lead Length Code

| Lead Length |   |
|-------------|---|
| 20mm min    | L |
| 35mm min    | B |
| 3.2mm       | 1 |
| 3.5mm       | 2 |
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire       |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | $\varnothing d$ | Tolerance |
| E14       | 18.0      | 0.5       | 11.0 | 0.5       | 5.0  | 0.5       | 15.0  | 0.5       | 0.6             | 0.05      |
| E17       | 18.0      | 0.5       | 12.0 | 0.5       | 6.0  | 0.5       | 15.0  | 0.5       | 0.6             | 0.05      |
| E29       | 18.0      | 0.5       | 13.5 | 0.5       | 7.5  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E34       | 18.0      | 0.5       | 14.5 | 0.5       | 8.5  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E39       | 18.0      | 0.5       | 18.0 | 0.5       | 9.0  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E43       | 18.0      | 0.5       | 16.0 | 0.5       | 10.0 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E47       | 18.0      | 0.5       | 19.0 | 0.5       | 11.0 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E52       | 18.0      | 0.5       | 22.0 | 0.5       | 12.5 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| F14       | 26.0      | 0.5       | 15.5 | 0.5       | 6.0  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F17       | 26.0      | 0.5       | 16.5 | 0.5       | 7.0  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F20       | 26.0      | 0.5       | 17.0 | 0.5       | 8.5  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F24       | 26.0      | 0.5       | 19.0 | 0.5       | 10.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F26       | 26.0      | 0.5       | 20.0 | 0.5       | 11.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F27       | 26.0      | 0.5       | 22.0 | 0.5       | 12.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F29       | 26.0      | 0.5       | 23.0 | 0.5       | 13.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F30       | 26.0      | 0.5       | 24.5 | 0.5       | 13.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F34       | 26.0      | 0.5       | 29.5 | 0.5       | 14.5 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F36       | 26.0      | 0.5       | 25.0 | 0.5       | 15.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |

**Size Code Table (mm)**

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | Ød        | Tolerance |
| G15       | 32.0      | 0.8       | 18.0 | 0.8       | 9.0  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32.0      | 0.8       | 20.0 | 0.8       | 11.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G21       | 32.0      | 0.8       | 22.0 | 0.8       | 13.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G22       | 32.0      | 0.8       | 24.5 | 0.8       | 13.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32.0      | 0.8       | 28.0 | 0.8       | 14.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G27       | 32.0      | 0.8       | 24.5 | 0.8       | 15.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G32       | 32.0      | 0.8       | 30.0 | 0.8       | 16.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G33       | 32.0      | 0.8       | 28.0 | 0.8       | 18.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32.0      | 0.8       | 33.0 | 0.8       | 18.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32.0      | 0.8       | 37.0 | 0.8       | 22.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| K11       | 42.0      | 1.0       | 24.0 | 1.0       | 13.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K13       | 42.0      | 1.0       | 26.0 | 1.0       | 15.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K18       | 42.0      | 1.0       | 29.0 | 1.0       | 17.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K21       | 42.0      | 1.0       | 32.0 | 1.0       | 19.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K24       | 42.0      | 1.0       | 40.0 | 1.0       | 20.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K27       | 42.0      | 1.0       | 37.0 | 1.0       | 22.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K32       | 42.0      | 1.0       | 44.0 | 1.0       | 24.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K39       | 42.0      | 1.0       | 43.0 | 1.0       | 28.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K42       | 42.0      | 1.0       | 45.0 | 1.0       | 30.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K47       | 42.0      | 1.0       | 50.0 | 1.0       | 35.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K82       | 42.0      | 1.0       | 32.0 | 1.0       | 17.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |

**Rating and Part Number**

| Vac | Vdc | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |     |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 350 | 700 | 0.01      | 18         | 11      | 5       | 15      | 5            | 15            | 500   | 0.6       | FX135K103E142EL5 |
| 350 | 700 | 0.022     | 18         | 11      | 5       | 15      | 11           | 33            | 500   | 0.6       | FX135K223E142EL5 |
| 350 | 700 | 0.033     | 18         | 11      | 5       | 15      | 16.5         | 49.5          | 500   | 0.6       | FX135K333E142EL5 |
| 350 | 700 | 0.047     | 18         | 11      | 5       | 15      | 23.5         | 70.5          | 500   | 0.6       | FX135K473E142EL5 |
| 350 | 700 | 0.068     | 18         | 12      | 6       | 15      | 34           | 102           | 500   | 0.6       | FX135K683E172EL5 |
| 350 | 700 | 0.1       | 18         | 13.5    | 7.5     | 15      | 50           | 150           | 500   | 0.8       | FX135K104E292EL5 |
| 350 | 700 | 0.15      | 18         | 14.5    | 8.5     | 15      | 75           | 225           | 500   | 0.8       | FX135K154E342EL5 |
| 350 | 700 | 0.22      | 18         | 16      | 10      | 15      | 110          | 330           | 500   | 0.8       | FX135K224E432EL5 |
| 350 | 700 | 0.33      | 18         | 19      | 11      | 15      | 165          | 495           | 500   | 0.8       | FX135K334E472EL5 |
| 350 | 700 | 0.047     | 26         | 15.5    | 6       | 22.5    | 18.8         | 56.4          | 400   | 0.6       | FX135K473F142FL5 |
| 350 | 700 | 0.068     | 26         | 15.5    | 6       | 22.5    | 27.2         | 81.6          | 400   | 0.6       | FX135K683F142FL5 |
| 350 | 700 | 0.1       | 26         | 15.5    | 6       | 22.5    | 40           | 120           | 400   | 0.6       | FX135K104F142FL5 |
| 350 | 700 | 0.15      | 26         | 15.5    | 6       | 22.5    | 60           | 180           | 400   | 0.6       | FX135K154F142FL5 |
| 350 | 700 | 0.22      | 26         | 16.5    | 7       | 22.5    | 88           | 264           | 400   | 0.8       | FX135K224F172FL5 |
| 350 | 700 | 0.33      | 26         | 17      | 8.5     | 22.5    | 132          | 396           | 400   | 0.8       | FX135K334F202FL5 |
| 350 | 700 | 0.47      | 26         | 19      | 10      | 22.5    | 188          | 564           | 400   | 0.8       | FX135K474F242FL5 |
| 350 | 700 | 0.68      | 26         | 22      | 12      | 22.5    | 272          | 816           | 400   | 0.8       | FX135K684F272FL5 |
| 350 | 700 | 1         | 26         | 25      | 15      | 22.5    | 400          | 1200          | 400   | 0.8       | FX135K105F362FL5 |
| 350 | 700 | 0.15      | 32         | 18      | 9       | 27.5    | 30           | 90            | 200   | 0.8       | FX135K154G152GL5 |
| 350 | 700 | 0.22      | 32         | 18      | 9       | 27.5    | 44           | 132           | 200   | 0.8       | FX135K224G152GL5 |
| 350 | 700 | 0.33      | 32         | 18      | 9       | 27.5    | 66           | 198           | 200   | 0.8       | FX135K334G152GL5 |
| 350 | 700 | 0.47      | 32         | 18      | 9       | 27.5    | 94           | 282           | 200   | 0.8       | FX135K474G152GL5 |
| 350 | 700 | 0.68      | 32         | 20      | 11      | 27.5    | 136          | 408           | 200   | 0.8       | FX135K684G182GL5 |
| 350 | 700 | 1         | 32         | 22      | 13      | 27.5    | 200          | 600           | 200   | 0.8       | FX135K105G212KL5 |
| 350 | 700 | 1.2       | 32         | 28      | 14      | 27.5    | 240          | 720           | 200   | 0.8       | FX135K125G262GL5 |
| 350 | 700 | 1.5       | 32         | 30      | 16      | 27.5    | 300          | 900           | 200   | 0.8       | FX135K155G322GL5 |
| 350 | 700 | 2.2       | 32         | 33      | 18      | 27.5    | 440          | 1320          | 200   | 0.8       | FX135K225G342GL5 |
| 350 | 700 | 3.3       | 32         | 37      | 22      | 27.5    | 660          | 1980          | 200   | 0.8       | FX135K335G402GL5 |
| 350 | 700 | 1         | 42         | 24      | 13      | 37.5    | 100          | 300           | 100   | 1.0       | FX135K105K112KL5 |
| 350 | 700 | 1.2       | 42         | 24      | 13      | 37.5    | 120          | 360           | 100   | 1.0       | FX135K125K112KL5 |
| 350 | 700 | 1.5       | 42         | 26      | 15      | 37.5    | 150          | 450           | 100   | 1.0       | FX135K155K132KL5 |
| 350 | 700 | 1.8       | 42         | 26      | 15      | 37.5    | 180          | 540           | 100   | 1.0       | FX135K185K132KL5 |
| 350 | 700 | 2.2       | 42         | 30      | 17      | 37.5    | 220          | 660           | 100   | 1.0       | FX135K225K182KL5 |
| 350 | 700 | 2.7       | 42         | 32      | 19      | 37.5    | 270          | 810           | 100   | 1.0       | FX135K275K212KL5 |
| 350 | 700 | 3.3       | 42         | 32      | 19      | 37.5    | 330          | 990           | 100   | 1.0       | FX135K335K212KL5 |
| 350 | 700 | 4.7       | 42         | 37      | 22      | 37.5    | 470          | 1410          | 100   | 1.0       | FX135K475K272KL5 |
| 350 | 700 | 5.6       | 42         | 44      | 24      | 37.5    | 560          | 1680          | 100   | 1.0       | FX135K565K322KL5 |

### Rating and Part Number

| Vac | Vdc  | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 480 | 1000 | 0.01      | 18         | 11      | 5       | 15      | 6            | 18            | 600   | 0.6       | FX148K103E142EL5 |
| 480 | 1000 | 0.015     | 18         | 11      | 5       | 15      | 9            | 27            | 600   | 0.6       | FX148K153E142EL5 |
| 480 | 1000 | 0.018     | 18         | 11      | 5       | 15      | 10.8         | 32.4          | 600   | 0.6       | FX148K183E142EL5 |
| 480 | 1000 | 0.022     | 18         | 11      | 5       | 15      | 13.2         | 39.6          | 600   | 0.6       | FX148K223E142EL5 |
| 480 | 1000 | 0.033     | 18         | 11      | 5       | 15      | 19.8         | 59.4          | 600   | 0.6       | FX148K333E142EL5 |
| 480 | 1000 | 0.047     | 18         | 12      | 6       | 15      | 28.2         | 84.6          | 600   | 0.6       | FX148K473E172EL5 |
| 480 | 1000 | 0.068     | 18         | 13.5    | 7.5     | 15      | 40.8         | 122.4         | 600   | 0.8       | FX148K683E292EL5 |
| 480 | 1000 | 0.1       | 18         | 14.5    | 8.5     | 15      | 60           | 180           | 600   | 0.8       | FX148K104E342EL5 |
| 480 | 1000 | 0.15      | 18         | 19      | 11      | 15      | 90           | 270           | 600   | 0.8       | FX148K154E472EL5 |
| 480 | 1000 | 0.22      | 18         | 22      | 12.5    | 15      | 132          | 396           | 600   | 0.8       | FX148K224E522EL5 |
| 480 | 1000 | 0.047     | 26         | 15.5    | 6       | 22.5    | 14.1         | 42.3          | 300   | 0.6       | FX148K473F142FL5 |
| 480 | 1000 | 0.056     | 26         | 15.5    | 6       | 22.5    | 16.8         | 50.4          | 300   | 0.6       | FX148K563F142FL5 |
| 480 | 1000 | 0.068     | 26         | 15.5    | 6       | 22.5    | 20.4         | 61.2          | 300   | 0.6       | FX148K683F142FL5 |
| 480 | 1000 | 0.082     | 26         | 15.5    | 6       | 22.5    | 24.6         | 73.8          | 300   | 0.6       | FX148K823F142FL5 |
| 480 | 1000 | 0.1       | 26         | 15.5    | 6       | 22.5    | 30           | 90            | 300   | 0.6       | FX148K104F142FL5 |
| 480 | 1000 | 0.15      | 26         | 16.5    | 7       | 22.5    | 45           | 135           | 300   | 0.8       | FX148K154F172FL5 |
| 480 | 1000 | 0.22      | 26         | 17      | 8.5     | 22.5    | 66           | 198           | 300   | 0.8       | FX148K224F202FL5 |
| 480 | 1000 | 0.33      | 26         | 20      | 11      | 22.5    | 99           | 297           | 300   | 0.8       | FX148K334F262FL5 |
| 480 | 1000 | 0.47      | 26         | 24.5    | 13      | 22.5    | 141          | 423           | 300   | 0.8       | FX148K474F302FL5 |
| 480 | 1000 | 0.56      | 26         | 25      | 15      | 22.5    | 168          | 504           | 300   | 0.8       | FX148K564F362FL5 |
| 480 | 1000 | 0.68      | 26         | 29.5    | 14.5    | 22.5    | 204          | 612           | 300   | 0.8       | FX148K684F342FL5 |
| 480 | 1000 | 0.15      | 32         | 18      | 9       | 27.5    | 30           | 90            | 200   | 0.8       | FX148K154G152GL5 |
| 480 | 1000 | 0.22      | 32         | 18      | 9       | 27.5    | 44           | 132           | 200   | 0.8       | FX148K224G152GL5 |
| 480 | 1000 | 0.33      | 32         | 18      | 9       | 27.5    | 66           | 198           | 200   | 0.8       | FX148K334G152GL5 |
| 480 | 1000 | 0.47      | 32         | 20      | 11      | 27.5    | 94           | 282           | 200   | 0.8       | FX148K474G182GL5 |
| 480 | 1000 | 0.56      | 32         | 22      | 13      | 27.5    | 112          | 336           | 200   | 0.8       | FX148K564G212GL5 |
| 480 | 1000 | 0.68      | 32         | 24.5    | 13      | 27.5    | 136          | 408           | 200   | 0.8       | FX148K684G222GL5 |
| 480 | 1000 | 0.82      | 32         | 28      | 14      | 27.5    | 164          | 492           | 200   | 0.8       | FX148K824G262GL5 |
| 480 | 1000 | 1         | 32         | 28      | 18      | 27.5    | 200          | 600           | 200   | 0.8       | FX148K105G332GL5 |
| 480 | 1000 | 1.2       | 32         | 33      | 18      | 27.5    | 240          | 720           | 200   | 0.8       | FX148K125G342GL5 |
| 480 | 1000 | 1.5       | 32         | 33      | 18      | 27.5    | 300          | 900           | 200   | 0.8       | FX148K155G342GL5 |
| 480 | 1000 | 1.8       | 32         | 37      | 22      | 27.5    | 360          | 1080          | 200   | 0.8       | FX148K185G402GL5 |
| 480 | 1000 | 0.47      | 42         | 24      | 13      | 37.5    | 70.5         | 211.5         | 150   | 1.0       | FX148K474K112KL5 |
| 480 | 1000 | 0.56      | 42         | 24      | 13      | 37.5    | 84           | 252           | 150   | 1.0       | FX148K564K112KL5 |
| 480 | 1000 | 0.68      | 42         | 24      | 13      | 37.5    | 102          | 306           | 150   | 1.0       | FX148K684K112KL5 |
| 480 | 1000 | 0.82      | 42         | 24      | 13      | 37.5    | 123          | 369           | 150   | 1.0       | FX148K824K112KL5 |
| 480 | 1000 | 1         | 42         | 24      | 13      | 37.5    | 150          | 450           | 150   | 1.0       | FX148K105K112KL5 |
| 480 | 1000 | 1.2       | 42         | 26      | 15      | 37.5    | 180          | 540           | 150   | 1.0       | FX148K125K132KL5 |
| 480 | 1000 | 1.5       | 42         | 30      | 17      | 37.5    | 225          | 675           | 150   | 1.0       | FX148K155K182KL5 |
| 480 | 1000 | 1.8       | 42         | 32      | 17      | 37.5    | 270          | 810           | 150   | 1.0       | FX148K185K822KL5 |
| 480 | 1000 | 2.2       | 42         | 32      | 19      | 37.5    | 330          | 990           | 150   | 1.0       | FX148K225K212KL5 |
| 480 | 1000 | 2.7       | 42         | 37      | 22      | 37.5    | 405          | 1215          | 150   | 1.0       | FX148K275K272KL5 |
| 480 | 1000 | 3.3       | 42         | 44      | 24      | 37.5    | 495          | 1485          | 150   | 1.0       | FX148K335K322KL5 |
| 480 | 1000 | 3.9       | 42         | 43      | 28      | 37.5    | 585          | 1755          | 150   | 1.0       | FX148K395K392KL5 |
| 480 | 1000 | 4.7       | 42         | 45      | 30      | 37.5    | 705          | 2115          | 150   | 1.0       | FX148K475K422KL5 |
| 480 | 1000 | 5.6       | 42         | 50      | 35      | 37.5    | 840          | 2520          | 150   | 1.0       | FX148K565K472KL5 |

**Rating and Part Number**

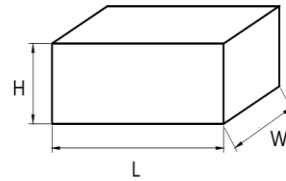
| Vac | Vdc  | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 530 | 1100 | 0.0068    | 18         | 11      | 5       | 15      | 4.08         | 12.24         | 600   | 0.6       | FX153K682E142EL5 |
| 530 | 1100 | 0.0082    | 18         | 11      | 5       | 15      | 4.92         | 14.76         | 600   | 0.6       | FX153K822E142EL5 |
| 530 | 1100 | 0.01      | 18         | 11      | 5       | 15      | 6            | 18            | 600   | 0.6       | FX153K103E142EL5 |
| 530 | 1100 | 0.022     | 18         | 12      | 6       | 15      | 13.2         | 39.6          | 600   | 0.6       | FX153K223E172EL5 |
| 530 | 1100 | 0.033     | 18         | 13.5    | 7.5     | 15      | 19.8         | 59.4          | 600   | 0.8       | FX153K334E292EL5 |
| 530 | 1100 | 0.047     | 18         | 14.5    | 8.5     | 15      | 28.2         | 84.6          | 600   | 0.8       | FX153K473E342EL5 |
| 530 | 1100 | 0.056     | 18         | 14.5    | 8.5     | 15      | 33.6         | 100.8         | 600   | 0.8       | FX153K563E342EL5 |
| 530 | 1100 | 0.068     | 18         | 18      | 9       | 15      | 40.8         | 122.4         | 600   | 0.8       | FX153K683E392EL5 |
| 530 | 1100 | 0.1       | 18         | 19      | 11      | 15      | 60           | 180           | 600   | 0.8       | FX153K104E472EL5 |
| 530 | 1100 | 0.033     | 26         | 15.5    | 6       | 22.5    | 9.9          | 29.7          | 300   | 0.6       | FX153K333F142FL5 |
| 530 | 1100 | 0.047     | 26         | 15.5    | 6       | 22.5    | 14.1         | 42.3          | 300   | 0.6       | FX153K473F142FL5 |
| 530 | 1100 | 0.056     | 26         | 15.5    | 6       | 22.5    | 16.8         | 50.4          | 300   | 0.6       | FX153K563F142FL5 |
| 530 | 1100 | 0.068     | 26         | 15.5    | 6       | 22.5    | 20.4         | 61.2          | 300   | 0.6       | FX153K683F142FL5 |
| 530 | 1100 | 0.082     | 26         | 15.5    | 6       | 22.5    | 24.6         | 73.8          | 300   | 0.6       | FX153M823F142FL5 |
| 530 | 1100 | 0.1       | 26         | 16.5    | 7       | 22.5    | 30           | 90            | 300   | 0.8       | FX153K104F172FL5 |
| 530 | 1100 | 0.15      | 26         | 17      | 8.5     | 22.5    | 45           | 135           | 300   | 0.8       | FX153K154F202FL5 |
| 530 | 1100 | 0.22      | 26         | 19      | 10      | 22.5    | 66           | 198           | 300   | 0.8       | FX153K224F242FL5 |
| 530 | 1100 | 0.33      | 26         | 22      | 12      | 22.5    | 99           | 297           | 300   | 0.8       | FX153K334F272FL5 |
| 530 | 1100 | 0.47      | 26         | 29.5    | 14.5    | 22.5    | 141          | 423           | 300   | 0.8       | FX153K474F342FL5 |
| 530 | 1100 | 0.15      | 32         | 20      | 11      | 27.5    | 30           | 90            | 200   | 0.8       | FX153K154G182GL5 |
| 530 | 1100 | 0.22      | 32         | 20      | 11      | 27.5    | 44           | 132           | 200   | 0.8       | FX153K224G182GL5 |
| 530 | 1100 | 0.33      | 32         | 20      | 11      | 27.5    | 66           | 198           | 200   | 0.8       | FX153K334G182GL5 |
| 530 | 1100 | 0.47      | 32         | 22      | 13      | 27.5    | 94           | 282           | 200   | 0.8       | FX153K474G212GL5 |
| 530 | 1100 | 0.47      | 32         | 24.5    | 13      | 27.5    | 94           | 282           | 200   | 0.8       | FX153K474G222GL5 |
| 530 | 1100 | 0.56      | 32         | 24.5    | 13      | 27.5    | 112          | 336           | 200   | 0.8       | FX153K564G222GL5 |
| 530 | 1100 | 0.68      | 32         | 24.5    | 15      | 27.5    | 136          | 408           | 200   | 0.8       | FX153K684G272GL5 |
| 530 | 1100 | 0.68      | 32         | 28      | 18      | 27.5    | 136          | 408           | 200   | 0.8       | FX153K684G332GL5 |
| 530 | 1100 | 0.82      | 32         | 28      | 18      | 27.5    | 164          | 492           | 200   | 0.8       | FX153K824G332GL5 |
| 530 | 1100 | 1         | 32         | 33      | 18      | 27.5    | 200          | 600           | 200   | 0.8       | FX153K105G342GL5 |
| 530 | 1100 | 1.5       | 32         | 37      | 22      | 27.5    | 300          | 900           | 200   | 0.8       | FX153K155G402GL5 |
| 530 | 1100 | 1.8       | 32         | 37      | 22      | 27.5    | 360          | 1080          | 200   | 0.8       | FX153M185G402GL5 |
| 530 | 1100 | 0.56      | 42         | 24      | 13      | 37.5    | 84           | 252           | 150   | 1.0       | FX153K564K112KL5 |
| 530 | 1100 | 0.68      | 42         | 24      | 13      | 37.5    | 102          | 306           | 150   | 1.0       | FX153K684K112KL5 |
| 530 | 1100 | 0.82      | 42         | 26      | 15      | 37.5    | 123          | 369           | 150   | 1.0       | FX153K824K132KL5 |
| 530 | 1100 | 1         | 42         | 26      | 15      | 37.5    | 150          | 450           | 150   | 1.0       | FX153K105K132KL5 |
| 530 | 1100 | 1         | 42         | 30      | 17      | 37.5    | 150          | 450           | 150   | 1.0       | FX153K105K182KL5 |
| 530 | 1100 | 1.5       | 42         | 32      | 17      | 37.5    | 225          | 675           | 150   | 1.0       | FX153M155K822KL5 |
| 530 | 1100 | 2         | 42         | 40      | 20      | 37.5    | 300          | 900           | 150   | 1.0       | FX153K205K242KL5 |

### Rating and Part Number

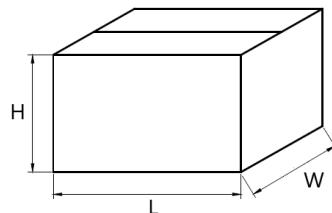
| Vac | Vdc  | Cap Value | Dimensions |      |      |      | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|------|------|------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W          | H    | T    | P    |              |               |       |           |                  |
| 760 | 1500 | 0.0047    | 18         | 11   | 5    | 15   | 3.055        | 9.165         | 650   | 0.6       | FX176K472E142EL5 |
| 760 | 1500 | 0.0056    | 18         | 11   | 5    | 15   | 3.64         | 10.92         | 650   | 0.6       | FX176K562E142EL5 |
| 760 | 1500 | 0.0068    | 18         | 11   | 5    | 15   | 4.42         | 13.26         | 650   | 0.6       | FX176K682E142EL5 |
| 760 | 1500 | 0.0082    | 18         | 11   | 5    | 15   | 5.33         | 15.99         | 650   | 0.6       | FX176K822E142EL5 |
| 760 | 1500 | 0.01      | 18         | 11   | 5    | 15   | 6.5          | 19.5          | 650   | 0.6       | FX176K103E142EL5 |
| 760 | 1500 | 0.012     | 18         | 12   | 6    | 15   | 7.8          | 23.4          | 650   | 0.6       | FX176K123E172EL5 |
| 760 | 1500 | 0.015     | 18         | 12   | 6    | 15   | 9.75         | 29.25         | 650   | 0.6       | FX176K153E172EL5 |
| 760 | 1500 | 0.022     | 18         | 13.5 | 7.5  | 15   | 14.3         | 42.9          | 650   | 0.8       | FX176K223E292EL5 |
| 760 | 1500 | 0.033     | 18         | 14.5 | 8.5  | 15   | 21.45        | 64.35         | 650   | 0.8       | FX176K333E342EL5 |
| 760 | 1500 | 0.047     | 18         | 19   | 11   | 15   | 30.55        | 91.65         | 650   | 0.8       | FX176K473E472EL5 |
| 760 | 1500 | 0.01      | 26         | 15.5 | 6    | 22.5 | 3.5          | 10.5          | 350   | 0.6       | FX176K103F142FL5 |
| 760 | 1500 | 0.012     | 26         | 15.5 | 6    | 22.5 | 4.2          | 12.6          | 350   | 0.6       | FX176K123F142FL5 |
| 760 | 1500 | 0.015     | 26         | 15.5 | 6    | 22.5 | 5.25         | 15.75         | 350   | 0.6       | FX176K153F142FL5 |
| 760 | 1500 | 0.018     | 26         | 15.5 | 6    | 22.5 | 6.3          | 18.9          | 350   | 0.6       | FX176K183F142FL5 |
| 760 | 1500 | 0.022     | 26         | 15.5 | 6    | 22.5 | 7.7          | 23.1          | 350   | 0.6       | FX176K223F142FL5 |
| 760 | 1500 | 0.027     | 26         | 15.5 | 6    | 22.5 | 9.45         | 28.35         | 350   | 0.6       | FX176K273F142FL5 |
| 760 | 1500 | 0.033     | 26         | 15.5 | 6    | 22.5 | 11.55        | 34.65         | 350   | 0.6       | FX176K333F142FL5 |
| 760 | 1500 | 0.047     | 26         | 15.5 | 6    | 22.5 | 16.45        | 49.35         | 350   | 0.6       | FX176K473F142FL5 |
| 760 | 1500 | 0.056     | 26         | 16.5 | 7    | 22.5 | 19.6         | 58.8          | 350   | 0.8       | FX176K563F172FL5 |
| 760 | 1500 | 0.068     | 26         | 16.5 | 7    | 22.5 | 23.8         | 71.4          | 350   | 0.8       | FX176K683F172FL5 |
| 760 | 1500 | 0.082     | 26         | 17   | 8.5  | 22.5 | 28.7         | 86.1          | 350   | 0.8       | FX176K823F202FL5 |
| 760 | 1500 | 0.1       | 26         | 19   | 10   | 22.5 | 35           | 105           | 350   | 0.8       | FX176K104F242FL5 |
| 760 | 1500 | 0.12      | 26         | 19   | 10   | 22.5 | 42           | 126           | 350   | 0.8       | FX176K124F242FL5 |
| 760 | 1500 | 0.15      | 26         | 19   | 10   | 22.5 | 52.5         | 157.5         | 350   | 0.8       | FX176K154F242FL5 |
| 760 | 1500 | 0.22      | 26         | 23   | 13   | 22.5 | 77           | 231           | 350   | 0.8       | FX176K224F292FL5 |
| 760 | 1500 | 0.33      | 26         | 29.5 | 14.5 | 22.5 | 115.5        | 346.5         | 350   | 0.8       | FX176K334F342FL5 |
| 760 | 1500 | 0.056     | 32         | 18   | 9    | 27.5 | 19.6         | 58.8          | 350   | 0.8       | FX176K563G152GL5 |
| 760 | 1500 | 0.068     | 32         | 18   | 9    | 27.5 | 17           | 51            | 250   | 0.8       | FX176K683G152GL5 |
| 760 | 1500 | 0.082     | 32         | 18   | 9    | 27.5 | 20.5         | 61.5          | 250   | 0.8       | FX176K823G152GL5 |
| 760 | 1500 | 0.1       | 32         | 18   | 9    | 27.5 | 25           | 75            | 250   | 0.8       | FX176K104G152GL5 |
| 760 | 1500 | 0.15      | 32         | 20   | 11   | 27.5 | 37.5         | 112.5         | 250   | 0.8       | FX176K154G182GL5 |
| 760 | 1500 | 0.22      | 32         | 22   | 13   | 27.5 | 55           | 165           | 250   | 0.8       | FX176K224G212GL5 |
| 760 | 1500 | 0.33      | 32         | 24.5 | 15   | 27.5 | 82.5         | 247.5         | 250   | 0.8       | FX176K334G272GL5 |
| 760 | 1500 | 0.39      | 32         | 28   | 18   | 27.5 | 97.5         | 292.5         | 250   | 0.8       | FX176K394G332GL5 |
| 760 | 1500 | 0.47      | 32         | 33   | 18   | 27.5 | 117.5        | 352.5         | 250   | 0.8       | FX176K474G342GL5 |
| 760 | 1500 | 0.56      | 32         | 33   | 18   | 27.5 | 140          | 420           | 250   | 0.8       | FX176K564G342GL5 |
| 760 | 1500 | 0.68      | 32         | 37   | 22   | 27.5 | 170          | 510           | 250   | 0.8       | FX176K684G402GL5 |
| 760 | 1500 | 0.33      | 42         | 24   | 13   | 37.5 | 66           | 198           | 200   | 1.0       | FX176K334K112KL5 |
| 760 | 1500 | 0.39      | 42         | 24   | 13   | 37.5 | 78           | 234           | 200   | 1.0       | FX176K394K112KL5 |
| 760 | 1500 | 0.47      | 42         | 26   | 15   | 37.5 | 94           | 282           | 200   | 1.0       | FX176K474K132KL5 |
| 760 | 1500 | 0.56      | 42         | 30   | 17   | 37.5 | 112          | 336           | 200   | 1.0       | FX176K564K182KL5 |
| 760 | 1500 | 0.68      | 42         | 30   | 17   | 37.5 | 136          | 408           | 200   | 1.0       | FX176K684K182KL5 |
| 760 | 1500 | 0.82      | 42         | 32   | 19   | 37.5 | 164          | 492           | 200   | 1.0       | FX176K824K212KL5 |
| 760 | 1500 | 1         | 42         | 32   | 19   | 37.5 | 200          | 600           | 200   | 1.0       | FX176K105K212KL5 |
| 760 | 1500 | 1.2       | 42         | 37   | 22   | 37.5 | 240          | 720           | 200   | 1.0       | FX176K125K272KL5 |
| 760 | 1500 | 1.5       | 42         | 44   | 24   | 37.5 | 300          | 900           | 200   | 1.0       | FX176K155K322KL5 |
| 760 | 1500 | 1.8       | 42         | 43   | 28   | 37.5 | 360          | 1080          | 200   | 1.0       | FX176K185K392KL5 |
| 760 | 1500 | 2         | 42         | 45   | 30   | 37.5 | 400          | 1200          | 200   | 1.0       | FX176K205K422KL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |      | Packaging Quantity |             |           |
|-------|-----------|-----------|------|------|--------------------|-------------|-----------|
|       |           | W         | H    | T    | Long Leads         | Short Leads | Ammo Pack |
| 15    | E14       | 18        | 11   | 5    | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6    | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5  | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5  | 600                | 612         | 390       |
|       | E39       | 18        | 18   | 9    | 600                | 578         | 370       |
|       | E43       | 18        | 16   | 10   | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11   | 600                | 476         | 300       |
|       | E52       | 18        | 22   | 12.5 | 600                | 408         | 260       |
| 22.5  | F14       | 26        | 15.5 | 6    |                    | 612         | 350       |
|       | F17       | 26        | 16.5 | 7    |                    | 528         | 300       |
|       | F20       | 26        | 17   | 8.5  |                    | 432         | 250       |
|       | F24       | 26        | 19   | 10   |                    | 372         | 210       |
|       | F26       | 26        | 20   | 11   |                    | 336         | 190       |
|       | F27       | 26        | 22   | 12   |                    | 300         | 170       |
|       | F29       | 26        | 23   | 13   |                    | 276         | 160       |
|       | F30       | 26        | 24.5 | 13   |                    | 276         | 160       |
|       | F34       | 26        | 29.5 | 14.5 |                    | 252         | 140       |
|       | F36       | 26        | 25   | 15   |                    | 240         | 140       |

Packaging Quantity

| Pitch | Size Code | Dimension |      |    | Packaging Quantity |             |           |
|-------|-----------|-----------|------|----|--------------------|-------------|-----------|
|       |           | W         | H    | T  | Long Leads         | Short Leads | Ammo Pack |
| 27.5  | G15       | 32        | 18   | 9  |                    | 340         | 230       |
|       | G18       | 32        | 20   | 11 |                    | 280         | 190       |
|       | G21       | 32        | 22   | 13 |                    | 230         | 160       |
|       | G22       | 32        | 24.5 | 13 |                    | 230         | 160       |
|       | G26       | 32        | 28   | 14 |                    | 220         | 150       |
|       | G27       | 32        | 24.5 | 15 |                    | 200         | 140       |
|       | G32       | 32        | 30   | 16 |                    | 190         | 130       |
|       | G33       | 32        | 28   | 18 |                    | 170         | 110       |
|       | G34       | 32        | 33   | 18 |                    | 170         | 110       |
|       | G40       | 32        | 37   | 22 |                    | 140         | 90        |
|       | K11       | 42        | 24   | 13 |                    | 161         |           |
|       | K13       | 42        | 26   | 15 |                    | 140         |           |
|       | K18       | 42        | 29   | 17 |                    | 126         |           |
|       | K21       | 42        | 32   | 19 |                    | 112         |           |
|       | K24       | 42        | 40   | 20 |                    | 105         |           |
|       | K27       | 42        | 37   | 22 |                    | 98          |           |
|       | K32       | 42        | 44   | 24 |                    | 91          |           |
|       | K39       | 42        | 43   | 28 |                    | 77          |           |
|       | K42       | 42        | 45   | 30 |                    | 70          |           |
|       | K47       | 42        | 50   | 35 |                    | 63          |           |
|       | K82       | 42        | 32   | 17 |                    | 126         |           |

## Overview

The FXG series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0. This FXG series robustness design is suitable for high humidity and high temperature environmental and compliant to THB Grade IIIB.

## Applications

For use as an electromagnetic interference (EMI) suppression filter in across-the-line applications that require X1 safety classification. Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.

## Features

- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Suitable for harsh environment conditions
- THB Grade IIIB  
(85°C 85%RH 1.0Un for 1000 hours)



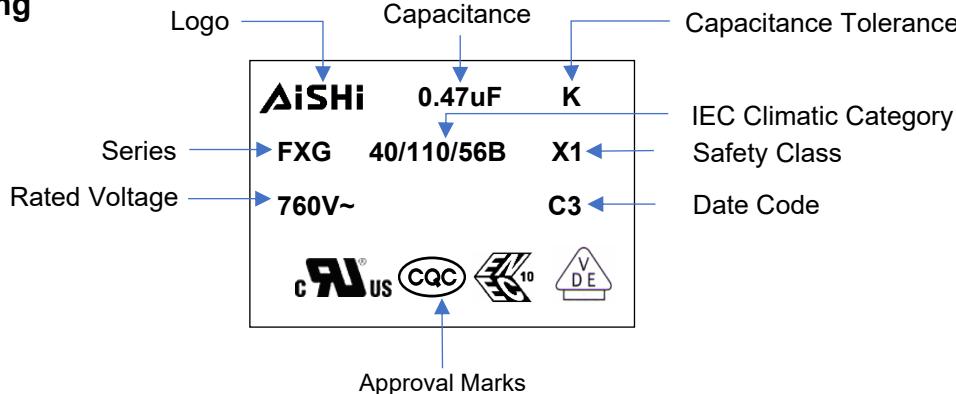
## Applicable Standard

| Approval | Standard   | File Number  |
|----------|--|--|
|          | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538  |
|          | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40052137   |
|          | IEC 60384-14:2013+AMD1:2016<br>CQC11-471112-2015 | CQC20001281016 (350~480Vac)<br>CQC20001281018 (530~760Vac) |

## General Technical Data

|                             |  |  |
|-----------------------------|--|--|
| Dielectric                  | Metallized Polypropylene Film  |  |
| Voltage Range               | 350Vac, 440/480Vac, 530Vac, 760Vac 50/60Hz   |  |
| Capacitance Range           | 0.0047µF to 5.6µF  |  |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |  |
| Climatic Category           | 40/110/56 IEC60068-1   |  |
| Dissipation Factor          | $\leq 10 \times 10^{-4}$ C < 0.47µF<br>$\leq 20 \times 10^{-4}$ 0.47µF ≤ C ≤ 1.0µF<br>$\leq 30 \times 10^{-4}$ C > 1.0µF       |  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 5000 MΩ*µF |  |

### Marking



### Part Number System

| F              | XG  | 76   | K                               | 474   | K13                      | 2EL                          | 5                          |
|----------------|---|--|---------------------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series                                    | Voltage (VAC)  | Tolerance                       | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | X1,<br>THB Type,<br>Metallized<br>PP Film | 35=350<br>44=440<br>48=480<br>53=530<br>60=600<br>76=760 | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

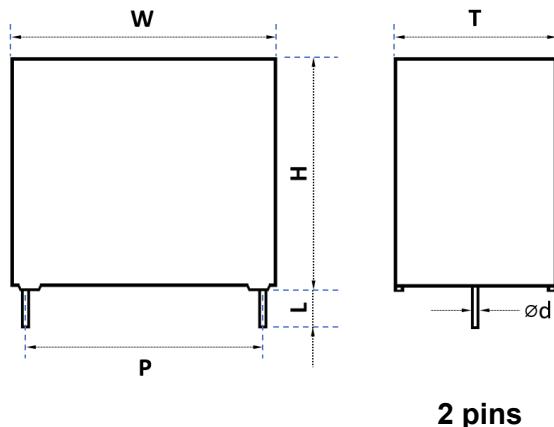
### Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 10.0mm                    | C | 5.1mm                             | A |
| 2 leads for straight cut          | 2 | 12.5mm                    | D | 7.5mm                             | C |
| 2 leads for forming cut           | E | 15.0mm                    | E | 10.2mm                            | B |
| 4 leads for straight cut          | 4 | 22.5mm                    | F | 12.7mm                            | G |
| Taping                            | T | 27.5mm                    | G | 20.3mm                            | D |
| Taping Straight                   | V | 37.5mm                    | K | N/A                               | L |
|                                   |   | 57.5mm                    | M |                                   |   |
|                                   |   | N/A                       | N |                                   |   |

### Lead Length Code

| Lead Length |   |
|-------------|---|
| 20mm min    | L |
| 35mm min    | B |
| 3.2mm       | 1 |
| 3.5mm       | 2 |
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire       |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | $\varnothing d$ | Tolerance |
| E14       | 18.0      | 0.5       | 11.0 | 0.5       | 5.0  | 0.5       | 15.0  | 0.5       | 0.6             | 0.05      |
| E17       | 18.0      | 0.5       | 12.0 | 0.5       | 6.0  | 0.5       | 15.0  | 0.5       | 0.6             | 0.05      |
| E29       | 18.0      | 0.5       | 13.5 | 0.5       | 7.5  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E34       | 18.0      | 0.5       | 14.5 | 0.5       | 8.5  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E39       | 18.0      | 0.5       | 18.0 | 0.5       | 9.0  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E43       | 18.0      | 0.5       | 16.0 | 0.5       | 10.0 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E47       | 18.0      | 0.5       | 19.0 | 0.5       | 11.0 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E52       | 18.0      | 0.5       | 22.0 | 0.5       | 12.5 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| F14       | 26.0      | 0.5       | 15.5 | 0.5       | 6.0  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F17       | 26.0      | 0.5       | 16.5 | 0.5       | 7.0  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F20       | 26.0      | 0.5       | 17.0 | 0.5       | 8.5  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F24       | 26.0      | 0.5       | 19.0 | 0.5       | 10.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F26       | 26.0      | 0.5       | 20.0 | 0.5       | 11.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F27       | 26.0      | 0.5       | 22.0 | 0.5       | 12.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F29       | 26.0      | 0.5       | 23.0 | 0.5       | 13.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F30       | 26.0      | 0.5       | 24.5 | 0.5       | 13.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F34       | 26.0      | 0.5       | 29.5 | 0.5       | 14.5 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F36       | 26.0      | 0.5       | 25.0 | 0.5       | 15.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |

### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | Ød        | Tolerance |
| G15       | 32.0      | 0.8       | 18.0 | 0.8       | 9.0  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32.0      | 0.8       | 20.0 | 0.8       | 11.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G21       | 32.0      | 0.8       | 22.0 | 0.8       | 13.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G22       | 32.0      | 0.8       | 24.5 | 0.8       | 13.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32.0      | 0.8       | 28.0 | 0.8       | 14.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G27       | 32.0      | 0.8       | 24.5 | 0.8       | 15.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G32       | 32.0      | 0.8       | 30.0 | 0.8       | 16.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G33       | 32.0      | 0.8       | 28.0 | 0.8       | 18.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32.0      | 0.8       | 33.0 | 0.8       | 18.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32.0      | 0.8       | 37.0 | 0.8       | 22.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| K11       | 42.0      | 1.0       | 24.0 | 1.0       | 13.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K13       | 42.0      | 1.0       | 26.0 | 1.0       | 15.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K18       | 42.0      | 1.0       | 29.0 | 1.0       | 17.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K21       | 42.0      | 1.0       | 32.0 | 1.0       | 19.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K24       | 42.0      | 1.0       | 40.0 | 1.0       | 20.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K27       | 42.0      | 1.0       | 37.0 | 1.0       | 22.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K32       | 42.0      | 1.0       | 44.0 | 1.0       | 24.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K39       | 42.0      | 1.0       | 43.0 | 1.0       | 28.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K42       | 42.0      | 1.0       | 45.0 | 1.0       | 30.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K47       | 42.0      | 1.0       | 50.0 | 1.0       | 35.0 | 1.0       | 37.5  | 0.5       | 1.2       | 0.05      |
| K82       | 42.0      | 1.0       | 32.0 | 1.0       | 17.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |

### Rating and Part Number

| Vac | Vdc | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |     |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 350 | 700 | 0.01      | 18         | 11      | 5       | 15      | 5            | 15            | 500   | 0.6       | FXG35K103E142EL5 |
| 350 | 700 | 0.022     | 18         | 11      | 5       | 15      | 11           | 33            | 500   | 0.6       | FXG35K223E142EL5 |
| 350 | 700 | 0.033     | 18         | 11      | 5       | 15      | 16.5         | 49.5          | 500   | 0.6       | FXG35K333E142EL5 |
| 350 | 700 | 0.047     | 18         | 11      | 5       | 15      | 23.5         | 70.5          | 500   | 0.6       | FXG35K473E142EL5 |
| 350 | 700 | 0.068     | 18         | 12      | 6       | 15      | 34           | 102           | 500   | 0.6       | FXG35K683E172EL5 |
| 350 | 700 | 0.1       | 18         | 13.5    | 7.5     | 15      | 50           | 150           | 500   | 0.8       | FXG35K104E292EL5 |
| 350 | 700 | 0.15      | 18         | 14.5    | 8.5     | 15      | 75           | 225           | 500   | 0.8       | FXG35K154E342EL5 |
| 350 | 700 | 0.22      | 18         | 16      | 10      | 15      | 110          | 330           | 500   | 0.8       | FXG35K224E432EL5 |
| 350 | 700 | 0.33      | 18         | 19      | 11      | 15      | 165          | 495           | 500   | 0.8       | FXG35K334E472EL5 |
| 350 | 700 | 0.047     | 26         | 15.5    | 6       | 22.5    | 18.8         | 56.4          | 400   | 0.6       | FXG35K473F142FL5 |
| 350 | 700 | 0.068     | 26         | 15.5    | 6       | 22.5    | 27.2         | 81.6          | 400   | 0.6       | FXG35K683F142FL5 |
| 350 | 700 | 0.1       | 26         | 15.5    | 6       | 22.5    | 40           | 120           | 400   | 0.6       | FXG35K104F142FL5 |
| 350 | 700 | 0.15      | 26         | 15.5    | 6       | 22.5    | 60           | 180           | 400   | 0.6       | FXG35K154F142FL5 |
| 350 | 700 | 0.22      | 26         | 16.5    | 7       | 22.5    | 88           | 264           | 400   | 0.8       | FXG35K224F172FL5 |
| 350 | 700 | 0.33      | 26         | 17      | 8.5     | 22.5    | 132          | 396           | 400   | 0.8       | FXG35K334F202FL5 |
| 350 | 700 | 0.47      | 26         | 19      | 10      | 22.5    | 188          | 564           | 400   | 0.8       | FXG35K474F242FL5 |
| 350 | 700 | 0.68      | 26         | 22      | 12      | 22.5    | 272          | 816           | 400   | 0.8       | FXG35K684F272FL5 |
| 350 | 700 | 1         | 26         | 25      | 15      | 22.5    | 400          | 1200          | 400   | 0.8       | FXG35K105F362FL5 |
| 350 | 700 | 0.15      | 32         | 18      | 9       | 27.5    | 30           | 90            | 200   | 0.8       | FXG35K154G152GL5 |
| 350 | 700 | 0.22      | 32         | 18      | 9       | 27.5    | 44           | 132           | 200   | 0.8       | FXG35K224G152GL5 |
| 350 | 700 | 0.33      | 32         | 18      | 9       | 27.5    | 66           | 198           | 200   | 0.8       | FXG35K334G152GL5 |
| 350 | 700 | 0.47      | 32         | 18      | 9       | 27.5    | 94           | 282           | 200   | 0.8       | FXG35K474G152GL5 |
| 350 | 700 | 0.68      | 32         | 20      | 11      | 27.5    | 136          | 408           | 200   | 0.8       | FXG35K684G182GL5 |
| 350 | 700 | 1         | 32         | 22      | 13      | 27.5    | 200          | 600           | 200   | 0.8       | FXG35K105G212GL5 |
| 350 | 700 | 1.2       | 32         | 28      | 14      | 27.5    | 240          | 720           | 200   | 0.8       | FXG35K125G262GL5 |
| 350 | 700 | 1.5       | 32         | 30      | 16      | 27.5    | 300          | 900           | 200   | 0.8       | FXG35K155G322GL5 |
| 350 | 700 | 2.2       | 32         | 33      | 18      | 27.5    | 440          | 1320          | 200   | 0.8       | FXG35K225G342GL5 |
| 350 | 700 | 3.3       | 32         | 37      | 22      | 27.5    | 660          | 1980          | 200   | 0.8       | FXG35K335G402GL5 |
| 350 | 700 | 1         | 42         | 24      | 13      | 37.5    | 100          | 300           | 100   | 1.0       | FXG35K105K112KL5 |
| 350 | 700 | 1.2       | 42         | 24      | 13      | 37.5    | 120          | 360           | 100   | 1.0       | FXG35K125K112KL5 |
| 350 | 700 | 1.5       | 42         | 26      | 15      | 37.5    | 150          | 450           | 100   | 1.0       | FXG35K155K132KL5 |
| 350 | 700 | 1.8       | 42         | 26      | 15      | 37.5    | 180          | 540           | 100   | 1.0       | FXG35K185K132KL5 |
| 350 | 700 | 2.2       | 42         | 30      | 17      | 37.5    | 220          | 660           | 100   | 1.0       | FXG35K225K182KL5 |
| 350 | 700 | 2.7       | 42         | 32      | 19      | 37.5    | 270          | 810           | 100   | 1.0       | FXG35K275K212KL5 |
| 350 | 700 | 3.3       | 42         | 32      | 19      | 37.5    | 330          | 990           | 100   | 1.0       | FXG35K335K212KL5 |
| 350 | 700 | 4.7       | 42         | 37      | 22      | 37.5    | 470          | 1410          | 100   | 1.0       | FXG35K475K272KL5 |
| 350 | 700 | 5.6       | 42         | 44      | 24      | 37.5    | 560          | 1680          | 100   | 1.0       | FXG35K565K322KL5 |

### Rating and Part Number

| Vac | Vdc  | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 480 | 1000 | 0.01      | 18         | 11      | 5       | 15      | 6            | 18            | 600   | 0.6       | FXG48K103E142EL5 |
| 480 | 1000 | 0.015     | 18         | 11      | 5       | 15      | 9            | 27            | 600   | 0.6       | FXG48K153E142EL5 |
| 480 | 1000 | 0.018     | 18         | 11      | 5       | 15      | 10.8         | 32.4          | 600   | 0.6       | FXG48K183E142EL5 |
| 480 | 1000 | 0.022     | 18         | 11      | 5       | 15      | 13.2         | 39.6          | 600   | 0.6       | FXG48K223E142EL5 |
| 480 | 1000 | 0.033     | 18         | 11      | 5       | 15      | 19.8         | 59.4          | 600   | 0.6       | FXG48K333E142EL5 |
| 480 | 1000 | 0.047     | 18         | 12      | 6       | 15      | 28.2         | 84.6          | 600   | 0.6       | FXG48K473E172EL5 |
| 480 | 1000 | 0.068     | 18         | 13.5    | 7.5     | 15      | 40.8         | 122.4         | 600   | 0.8       | FXG48K683E292EL5 |
| 480 | 1000 | 0.1       | 18         | 14.5    | 8.5     | 15      | 60           | 180           | 600   | 0.8       | FXG48K104E342EL5 |
| 480 | 1000 | 0.15      | 18         | 19      | 11      | 15      | 90           | 270           | 600   | 0.8       | FXG48K154E472EL5 |
| 480 | 1000 | 0.22      | 18         | 22      | 12.5    | 15      | 132          | 396           | 600   | 0.8       | FXG48K224E522EL5 |
| 480 | 1000 | 0.047     | 26         | 15.5    | 6       | 22.5    | 14.1         | 42.3          | 300   | 0.6       | FXG48K473F142FL5 |
| 480 | 1000 | 0.056     | 26         | 15.5    | 6       | 22.5    | 16.8         | 50.4          | 300   | 0.6       | FXG48K563F142FL5 |
| 480 | 1000 | 0.068     | 26         | 15.5    | 6       | 22.5    | 20.4         | 61.2          | 300   | 0.6       | FXG48K683F142FL5 |
| 480 | 1000 | 0.082     | 26         | 15.5    | 6       | 22.5    | 24.6         | 73.8          | 300   | 0.6       | FXG48K823F142FL5 |
| 480 | 1000 | 0.1       | 26         | 15.5    | 6       | 22.5    | 30           | 90            | 300   | 0.6       | FXG48K104F142FL5 |
| 480 | 1000 | 0.15      | 26         | 16.5    | 7       | 22.5    | 45           | 135           | 300   | 0.8       | FXG48K154F172FL5 |
| 480 | 1000 | 0.22      | 26         | 17      | 8.5     | 22.5    | 66           | 198           | 300   | 0.8       | FXG48K224F202FL5 |
| 480 | 1000 | 0.33      | 26         | 20      | 11      | 22.5    | 99           | 297           | 300   | 0.8       | FXG48K334F262FL5 |
| 480 | 1000 | 0.47      | 26         | 24.5    | 13      | 22.5    | 141          | 423           | 300   | 0.8       | FXG48K474F302FL5 |
| 480 | 1000 | 0.56      | 26         | 25      | 15      | 22.5    | 168          | 504           | 300   | 0.8       | FXG48K564F362FL5 |
| 480 | 1000 | 0.68      | 26         | 29.5    | 14.5    | 22.5    | 204          | 612           | 300   | 0.8       | FXG48K684F342FL5 |
| 480 | 1000 | 0.15      | 32         | 18      | 9       | 27.5    | 30           | 90            | 200   | 0.8       | FXG48K154G152GL5 |
| 480 | 1000 | 0.22      | 32         | 18      | 9       | 27.5    | 44           | 132           | 200   | 0.8       | FXG48K224G152GL5 |
| 480 | 1000 | 0.33      | 32         | 18      | 9       | 27.5    | 66           | 198           | 200   | 0.8       | FXG48K334G152GL5 |
| 480 | 1000 | 0.47      | 32         | 20      | 11      | 27.5    | 94           | 282           | 200   | 0.8       | FXG48K474G182GL5 |
| 480 | 1000 | 0.56      | 32         | 22      | 13      | 27.5    | 112          | 336           | 200   | 0.8       | FXG48K564G212GL5 |
| 480 | 1000 | 0.68      | 32         | 24.5    | 13      | 27.5    | 136          | 408           | 200   | 0.8       | FXG48K684G222GL5 |
| 480 | 1000 | 0.82      | 32         | 28      | 14      | 27.5    | 164          | 492           | 200   | 0.8       | FXG48K824G262GL5 |
| 480 | 1000 | 1         | 32         | 28      | 18      | 27.5    | 200          | 600           | 200   | 0.8       | FXG48K105G332GL5 |
| 480 | 1000 | 1.2       | 32         | 33      | 18      | 27.5    | 240          | 720           | 200   | 0.8       | FXG48K125G342GL5 |
| 480 | 1000 | 1.5       | 32         | 33      | 18      | 27.5    | 300          | 900           | 200   | 0.8       | FXG48K155G342GL5 |
| 480 | 1000 | 1.8       | 32         | 37      | 22      | 27.5    | 360          | 1080          | 200   | 0.8       | FXG48K185G402GL5 |
| 480 | 1000 | 0.47      | 42         | 24      | 13      | 37.5    | 70.5         | 211.5         | 150   | 1.0       | FXG48K474K112KL5 |
| 480 | 1000 | 0.56      | 42         | 24      | 13      | 37.5    | 84           | 252           | 150   | 1.0       | FXG48K564K112KL5 |
| 480 | 1000 | 0.68      | 42         | 24      | 13      | 37.5    | 102          | 306           | 150   | 1.0       | FXG48K684K112KL5 |
| 480 | 1000 | 0.82      | 42         | 24      | 13      | 37.5    | 123          | 369           | 150   | 1.0       | FXG48K824K112KL5 |
| 480 | 1000 | 1         | 42         | 24      | 13      | 37.5    | 150          | 450           | 150   | 1.0       | FXG48K105K112KL5 |
| 480 | 1000 | 1.2       | 42         | 26      | 15      | 37.5    | 180          | 540           | 150   | 1.0       | FXG48K125K132KL5 |
| 480 | 1000 | 1.5       | 42         | 30      | 17      | 37.5    | 225          | 675           | 150   | 1.0       | FXG48K155K182KL5 |
| 480 | 1000 | 1.8       | 42         | 32      | 17      | 37.5    | 270          | 810           | 150   | 1.0       | FXG48K185K822KL5 |
| 480 | 1000 | 2.2       | 42         | 32      | 19      | 37.5    | 330          | 990           | 150   | 1.0       | FXG48K225K212KL5 |
| 480 | 1000 | 2.7       | 42         | 37      | 22      | 37.5    | 405          | 1215          | 150   | 1.0       | FXG48K275K272KL5 |
| 480 | 1000 | 3.3       | 42         | 44      | 24      | 37.5    | 495          | 1485          | 150   | 1.0       | FXG48K335K322KL5 |
| 480 | 1000 | 3.9       | 42         | 43      | 28      | 37.5    | 585          | 1755          | 150   | 1.0       | FXG48K395K392KL5 |
| 480 | 1000 | 4.7       | 42         | 45      | 30      | 37.5    | 705          | 2115          | 150   | 1.0       | FXG48K475K422KL5 |
| 480 | 1000 | 5.6       | 42         | 50      | 35      | 37.5    | 840          | 2520          | 150   | 1.0       | FXG48K565K472KL5 |

### Rating and Part Number

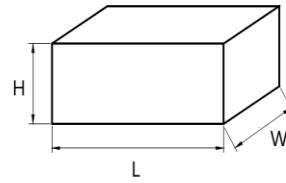
| Vac | Vdc  | Cap Value | Dimensions |      |      |      | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|------|------|------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W          | H    | T    | P    |              |               |       |           |                  |
|     |      | µF        | mm         | mm   | mm   | mm   | A            | A             | V/us  | mm        |                  |
| 530 | 1100 | 0.0068    | 18         | 11   | 5    | 15   | 4.08         | 12.24         | 600   | 0.6       | FXG53K682E142EL5 |
| 530 | 1100 | 0.0082    | 18         | 11   | 5    | 15   | 4.92         | 14.76         | 600   | 0.6       | FXG53K822E142EL5 |
| 530 | 1100 | 0.01      | 18         | 11   | 5    | 15   | 6            | 18            | 600   | 0.6       | FXG53K103E142EL5 |
| 530 | 1100 | 0.022     | 18         | 12   | 6    | 15   | 13.2         | 39.6          | 600   | 0.6       | FXG53K223E172EL5 |
| 530 | 1100 | 0.033     | 18         | 13.5 | 7.5  | 15   | 19.8         | 59.4          | 600   | 0.8       | FXG53K334E292EL5 |
| 530 | 1100 | 0.047     | 18         | 14.5 | 8.5  | 15   | 28.2         | 84.6          | 600   | 0.8       | FXG53K473E342EL5 |
| 530 | 1100 | 0.056     | 18         | 14.5 | 8.5  | 15   | 33.6         | 100.8         | 600   | 0.8       | FXG53K563E342EL5 |
| 530 | 1100 | 0.068     | 18         | 18   | 9    | 15   | 40.8         | 122.4         | 600   | 0.8       | FXG53K683E392EL5 |
| 530 | 1100 | 0.1       | 18         | 19   | 11   | 15   | 60           | 180           | 600   | 0.8       | FXG53K104E472EL5 |
| 530 | 1100 | 0.033     | 26         | 15.5 | 6    | 22.5 | 9.9          | 29.7          | 300   | 0.6       | FXG53K333F142FL5 |
| 530 | 1100 | 0.047     | 26         | 15.5 | 6    | 22.5 | 14.1         | 42.3          | 300   | 0.6       | FXG53K473F142FL5 |
| 530 | 1100 | 0.056     | 26         | 15.5 | 6    | 22.5 | 16.8         | 50.4          | 300   | 0.6       | FXG53K563F142FL5 |
| 530 | 1100 | 0.068     | 26         | 15.5 | 6    | 22.5 | 20.4         | 61.2          | 300   | 0.6       | FXG53K683F142FL5 |
| 530 | 1100 | 0.082     | 26         | 15.5 | 6    | 22.5 | 24.6         | 73.8          | 300   | 0.6       | FXG53M823F142FL5 |
| 530 | 1100 | 0.1       | 26         | 16.5 | 7    | 22.5 | 30           | 90            | 300   | 0.8       | FXG53K104F172FL5 |
| 530 | 1100 | 0.15      | 26         | 17   | 8.5  | 22.5 | 45           | 135           | 300   | 0.8       | FXG53K154F202FL5 |
| 530 | 1100 | 0.22      | 26         | 19   | 10   | 22.5 | 66           | 198           | 300   | 0.8       | FXG53K224F242FL5 |
| 530 | 1100 | 0.33      | 26         | 22   | 12   | 22.5 | 99           | 297           | 300   | 0.8       | FXG53K334F272FL5 |
| 530 | 1100 | 0.47      | 26         | 29.5 | 14.5 | 22.5 | 141          | 423           | 300   | 0.8       | FXG53K474F342FL5 |
| 530 | 1100 | 0.15      | 32         | 20   | 11   | 27.5 | 30           | 90            | 200   | 0.8       | FXG53K154G182GL5 |
| 530 | 1100 | 0.22      | 32         | 20   | 11   | 27.5 | 44           | 132           | 200   | 0.8       | FXG53K224G182GL5 |
| 530 | 1100 | 0.33      | 32         | 20   | 11   | 27.5 | 66           | 198           | 200   | 0.8       | FXG53K334G182GL5 |
| 530 | 1100 | 0.47      | 32         | 22   | 13   | 27.5 | 94           | 282           | 200   | 0.8       | FXG53K474G212GL5 |
| 530 | 1100 | 0.47      | 32         | 24.5 | 13   | 27.5 | 94           | 282           | 200   | 0.8       | FXG53K474G222GL5 |
| 530 | 1100 | 0.56      | 32         | 24.5 | 13   | 27.5 | 112          | 336           | 200   | 0.8       | FXG53K564G222GL5 |
| 530 | 1100 | 0.68      | 32         | 24.5 | 15   | 27.5 | 136          | 408           | 200   | 0.8       | FXG53K684G272GL5 |
| 530 | 1100 | 0.68      | 32         | 28   | 18   | 27.5 | 136          | 408           | 200   | 0.8       | FXG53K684G332GL5 |
| 530 | 1100 | 0.82      | 32         | 28   | 18   | 27.5 | 164          | 492           | 200   | 0.8       | FXG53K824G332GL5 |
| 530 | 1100 | 1         | 32         | 33   | 18   | 27.5 | 200          | 600           | 200   | 0.8       | FXG53K105G342GL5 |
| 530 | 1100 | 1.5       | 32         | 37   | 22   | 27.5 | 300          | 900           | 200   | 0.8       | FXG53K155G402GL5 |
| 530 | 1100 | 1.8       | 32         | 37   | 22   | 27.5 | 360          | 1080          | 200   | 0.8       | FXG53M185G402GL5 |
| 530 | 1100 | 0.56      | 42         | 24   | 13   | 37.5 | 84           | 252           | 150   | 1.0       | FXG53K564K112KL5 |
| 530 | 1100 | 0.68      | 42         | 24   | 13   | 37.5 | 102          | 306           | 150   | 1.0       | FXG53K684K112KL5 |
| 530 | 1100 | 0.82      | 42         | 26   | 15   | 37.5 | 123          | 369           | 150   | 1.0       | FXG53K824K132KL5 |
| 530 | 1100 | 1         | 42         | 26   | 15   | 37.5 | 150          | 450           | 150   | 1.0       | FXG53K105K132KL5 |
| 530 | 1100 | 1         | 42         | 30   | 17   | 37.5 | 150          | 450           | 150   | 1.0       | FXG53K105K182KL5 |
| 530 | 1100 | 1.5       | 42         | 32   | 17   | 37.5 | 225          | 675           | 150   | 1.0       | FXG53M155K822KL5 |
| 530 | 1100 | 2         | 42         | 40   | 20   | 37.5 | 300          | 900           | 150   | 1.0       | FXG53K205K242KL5 |

### Rating and Part Number

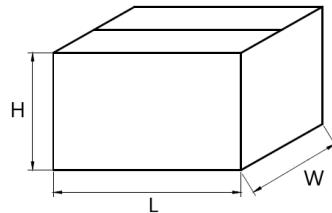
| Vac | Vdc  | Cap Value | Dimensions |      |      |      | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|------|------|------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W          | H    | T    | P    |              |               |       |           |                  |
| 760 | 1500 | 0.0047    | 18         | 11   | 5    | 15   | 3.055        | 9.165         | 650   | 0.6       | FXG76K472E142EL5 |
| 760 | 1500 | 0.0056    | 18         | 11   | 5    | 15   | 3.64         | 10.92         | 650   | 0.6       | FXG76K562E142EL5 |
| 760 | 1500 | 0.0068    | 18         | 11   | 5    | 15   | 4.42         | 13.26         | 650   | 0.6       | FXG76K682E142EL5 |
| 760 | 1500 | 0.0082    | 18         | 11   | 5    | 15   | 5.33         | 15.99         | 650   | 0.6       | FXG76K822E142EL5 |
| 760 | 1500 | 0.01      | 18         | 11   | 5    | 15   | 6.5          | 19.5          | 650   | 0.6       | FXG76K103E142EL5 |
| 760 | 1500 | 0.012     | 18         | 12   | 6    | 15   | 7.8          | 23.4          | 650   | 0.6       | FXG76K123E172EL5 |
| 760 | 1500 | 0.015     | 18         | 12   | 6    | 15   | 9.75         | 29.25         | 650   | 0.6       | FXG76K153E172EL5 |
| 760 | 1500 | 0.022     | 18         | 13.5 | 7.5  | 15   | 14.3         | 42.9          | 650   | 0.8       | FXG76K223E292EL5 |
| 760 | 1500 | 0.033     | 18         | 14.5 | 8.5  | 15   | 21.45        | 64.35         | 650   | 0.8       | FXG76K333E342EL5 |
| 760 | 1500 | 0.047     | 18         | 19   | 11   | 15   | 30.55        | 91.65         | 650   | 0.8       | FXG76K473E472EL5 |
| 760 | 1500 | 0.01      | 26         | 15.5 | 6    | 22.5 | 3.5          | 10.5          | 350   | 0.6       | FXG76K103F142FL5 |
| 760 | 1500 | 0.012     | 26         | 15.5 | 6    | 22.5 | 4.2          | 12.6          | 350   | 0.6       | FXG76K123F142FL5 |
| 760 | 1500 | 0.015     | 26         | 15.5 | 6    | 22.5 | 5.25         | 15.75         | 350   | 0.6       | FXG76K153F142FL5 |
| 760 | 1500 | 0.018     | 26         | 15.5 | 6    | 22.5 | 6.3          | 18.9          | 350   | 0.6       | FXG76K183F142FL5 |
| 760 | 1500 | 0.022     | 26         | 15.5 | 6    | 22.5 | 7.7          | 23.1          | 350   | 0.6       | FXG76K223F142FL5 |
| 760 | 1500 | 0.027     | 26         | 15.5 | 6    | 22.5 | 9.45         | 28.35         | 350   | 0.6       | FXG76K273F142FL5 |
| 760 | 1500 | 0.033     | 26         | 15.5 | 6    | 22.5 | 11.55        | 34.65         | 350   | 0.6       | FXG76K333F142FL5 |
| 760 | 1500 | 0.047     | 26         | 15.5 | 6    | 22.5 | 16.45        | 49.35         | 350   | 0.6       | FXG76K473F142FL5 |
| 760 | 1500 | 0.056     | 26         | 16.5 | 7    | 22.5 | 19.6         | 58.8          | 350   | 0.8       | FXG76K563F172FL5 |
| 760 | 1500 | 0.068     | 26         | 16.5 | 7    | 22.5 | 23.8         | 71.4          | 350   | 0.8       | FXG76K683F172FL5 |
| 760 | 1500 | 0.082     | 26         | 17   | 8.5  | 22.5 | 28.7         | 86.1          | 350   | 0.8       | FXG76K823F202FL5 |
| 760 | 1500 | 0.1       | 26         | 19   | 10   | 22.5 | 35           | 105           | 350   | 0.8       | FXG76K104F242FL5 |
| 760 | 1500 | 0.12      | 26         | 19   | 10   | 22.5 | 42           | 126           | 350   | 0.8       | FXG76K124F242FL5 |
| 760 | 1500 | 0.15      | 26         | 19   | 10   | 22.5 | 52.5         | 157.5         | 350   | 0.8       | FXG76K154F242FL5 |
| 760 | 1500 | 0.22      | 26         | 23   | 13   | 22.5 | 77           | 231           | 350   | 0.8       | FXG76K224F292FL5 |
| 760 | 1500 | 0.33      | 26         | 29.5 | 14.5 | 22.5 | 115.5        | 346.5         | 350   | 0.8       | FXG76K334F342FL5 |
| 760 | 1500 | 0.056     | 32         | 18   | 9    | 27.5 | 19.6         | 58.8          | 350   | 0.8       | FXG76K563G152GL5 |
| 760 | 1500 | 0.068     | 32         | 18   | 9    | 27.5 | 17           | 51            | 250   | 0.8       | FXG76K683G152GL5 |
| 760 | 1500 | 0.082     | 32         | 18   | 9    | 27.5 | 20.5         | 61.5          | 250   | 0.8       | FXG76K823G152GL5 |
| 760 | 1500 | 0.1       | 32         | 18   | 9    | 27.5 | 25           | 75            | 250   | 0.8       | FXG76K104G152GL5 |
| 760 | 1500 | 0.15      | 32         | 20   | 11   | 27.5 | 37.5         | 112.5         | 250   | 0.8       | FXG76K154G182GL5 |
| 760 | 1500 | 0.22      | 32         | 22   | 13   | 27.5 | 55           | 165           | 250   | 0.8       | FXG76K224G212GL5 |
| 760 | 1500 | 0.33      | 32         | 24.5 | 15   | 27.5 | 82.5         | 247.5         | 250   | 0.8       | FXG76K334G272GL5 |
| 760 | 1500 | 0.39      | 32         | 28   | 18   | 27.5 | 97.5         | 292.5         | 250   | 0.8       | FXG76K394G332GL5 |
| 760 | 1500 | 0.47      | 32         | 33   | 18   | 27.5 | 117.5        | 352.5         | 250   | 0.8       | FXG76K474G342GL5 |
| 760 | 1500 | 0.56      | 32         | 33   | 18   | 27.5 | 140          | 420           | 250   | 0.8       | FXG76K564G342GL5 |
| 760 | 1500 | 0.68      | 32         | 37   | 22   | 27.5 | 170          | 510           | 250   | 0.8       | FXG76K684G402GL5 |
| 760 | 1500 | 0.33      | 42         | 24   | 13   | 37.5 | 66           | 198           | 200   | 1.0       | FXG76K334K112KL5 |
| 760 | 1500 | 0.39      | 42         | 24   | 13   | 37.5 | 78           | 234           | 200   | 1.0       | FXG76K394K112KL5 |
| 760 | 1500 | 0.47      | 42         | 26   | 15   | 37.5 | 94           | 282           | 200   | 1.0       | FXG76K474K132KL5 |
| 760 | 1500 | 0.56      | 42         | 30   | 17   | 37.5 | 112          | 336           | 200   | 1.0       | FXG76K564K182KL5 |
| 760 | 1500 | 0.68      | 42         | 30   | 17   | 37.5 | 136          | 408           | 200   | 1.0       | FXG76K684K182KL5 |
| 760 | 1500 | 0.82      | 42         | 32   | 19   | 37.5 | 164          | 492           | 200   | 1.0       | FXG76K824K212KL5 |
| 760 | 1500 | 1         | 42         | 32   | 19   | 37.5 | 200          | 600           | 200   | 1.0       | FXG76K105K212KL5 |
| 760 | 1500 | 1.2       | 42         | 37   | 22   | 37.5 | 240          | 720           | 200   | 1.0       | FXG76K125K272KL5 |
| 760 | 1500 | 1.5       | 42         | 44   | 24   | 37.5 | 300          | 900           | 200   | 1.0       | FXG76K155K322KL5 |
| 760 | 1500 | 1.8       | 42         | 43   | 28   | 37.5 | 360          | 1080          | 200   | 1.0       | FXG76K185K392KL5 |
| 760 | 1500 | 2         | 42         | 45   | 30   | 37.5 | 400          | 1200          | 200   | 1.0       | FXG76K205K422KL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |      | Packaging Quantity |             |           |
|-------|-----------|-----------|------|------|--------------------|-------------|-----------|
|       |           | W         | H    | T    | Long Leads         | Short Leads | Ammo Pack |
| 15    | E14       | 18        | 11   | 5    | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6    | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5  | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5  | 600                | 612         | 390       |
|       | E39       | 18        | 18   | 9    | 600                | 578         | 370       |
|       | E43       | 18        | 16   | 10   | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11   | 600                | 476         | 300       |
|       | E52       | 18        | 22   | 12.5 | 600                | 408         | 260       |
| 22.5  | F14       | 26        | 15.5 | 6    |                    | 612         | 350       |
|       | F17       | 26        | 16.5 | 7    |                    | 528         | 300       |
|       | F20       | 26        | 17   | 8.5  |                    | 432         | 250       |
|       | F24       | 26        | 19   | 10   |                    | 372         | 210       |
|       | F26       | 26        | 20   | 11   |                    | 336         | 190       |
|       | F27       | 26        | 22   | 12   |                    | 300         | 170       |
|       | F29       | 26        | 23   | 13   |                    | 276         | 160       |
|       | F30       | 26        | 24.5 | 13   |                    | 276         | 160       |
|       | F34       | 26        | 29.5 | 14.5 |                    | 252         | 140       |
|       | F36       | 26        | 25   | 15   |                    | 240         | 140       |

Packaging Quantity

| Pitch | Size Code | Dimension |      |    | Packaging Quantity |             |           |
|-------|-----------|-----------|------|----|--------------------|-------------|-----------|
|       |           | W         | H    | T  | Long Leads         | Short Leads | Ammo Pack |
| 27.5  | G15       | 32        | 18   | 9  |                    | 340         | 230       |
|       | G18       | 32        | 20   | 11 |                    | 280         | 190       |
|       | G21       | 32        | 22   | 13 |                    | 230         | 160       |
|       | G22       | 32        | 24.5 | 13 |                    | 230         | 160       |
|       | G26       | 32        | 28   | 14 |                    | 220         | 150       |
|       | G27       | 32        | 24.5 | 15 |                    | 200         | 140       |
|       | G32       | 32        | 30   | 16 |                    | 190         | 130       |
|       | G33       | 32        | 28   | 18 |                    | 170         | 110       |
|       | G34       | 32        | 33   | 18 |                    | 170         | 110       |
|       | G40       | 32        | 37   | 22 |                    | 140         | 90        |
|       | K11       | 42        | 24   | 13 |                    | 161         |           |
|       | K13       | 42        | 26   | 15 |                    | 140         |           |
|       | K18       | 42        | 29   | 17 |                    | 126         |           |
|       | K21       | 42        | 32   | 19 |                    | 112         |           |
|       | K24       | 42        | 40   | 20 |                    | 105         |           |
|       | K27       | 42        | 37   | 22 |                    | 98          |           |
|       | K32       | 42        | 44   | 24 |                    | 91          |           |
|       | K39       | 42        | 43   | 28 |                    | 77          |           |
|       | K42       | 42        | 45   | 30 |                    | 70          |           |
|       | K47       | 42        | 50   | 35 |                    | 63          |           |
|       | K82       | 42        | 32   | 17 |                    | 126         |           |

## Overview

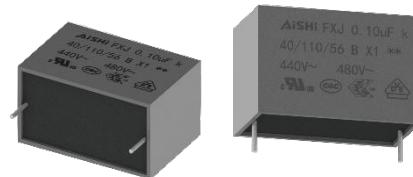
The FXJ series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0. This FXJ series robustness design is suitable for high humidity and high temperature environmental and qualify in accordance to AEC-Q200D requirement.

## Features

- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Suitable for harsh environment conditions
- THB Grade IIIB  
(85°C 85%RH 1.0U<sub>RAC</sub> for 1000 hours)
- Automotive Grade (AEC-Q200D)

## Applications

For use as an electromagnetic interference (EMI) suppression filter in across-the-line applications that require X1 safety classification. Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.



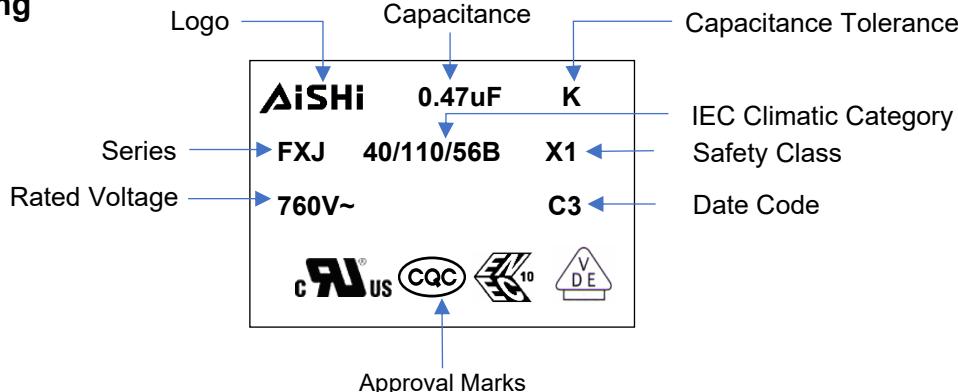
## Approvals

| Marking | Standard   | File Number  |
|---------|--|--|
|         | UL 60384-14<br>CAN/CSA-E60384-14                 | E500538  |
|         | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | 40052137   |
|         | IEC 60384-14:2013+AMD1:2016<br>CQC11-471112-2015 | CQC20001281016 (350~480Vac)<br>CQC20001281018 (530~760Vac) |

## General Technical Data

|                             |  |  |
|-----------------------------|--|--|
| Dielectric                  | Metallized Polypropylene Film  |  |
| Voltage Range               | 350Vac, 480Vac, 530Vac 50/60Hz   |  |
| Capacitance Range           | 0.0068µF to 3.3µF  |  |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |  |
| Operating Temperature Range | -40°C ~ +110°C<br>(85°C ~110°C, decreasing factor 1.35% per °C for Urms)   |  |
| Climatic Category           | 40/110/56 IEC60068-1   |  |
| Dissipation Factor          | $\leq 10 \times 10^{-4}$ C < 0.47µF<br>$\leq 20 \times 10^{-4}$ 0.47µF ≤ C ≤ 1.0µF<br>$\leq 30 \times 10^{-4}$ C > 1.0µF       |  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 15 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 5000 MΩ*µF |  |

### Marking



### Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

### Part Number System

| F              | XJ  | 48                                   | K                               | 104   | E34                      | 2EL                          | 5                          |
|----------------|---|--------------------------------------|---------------------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series  | Voltage (VAC)                        | Tolerance                       | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | X1,<br>THB Type,<br>AEC-Q200D,<br>Metallized<br>PP Film | 35=350<br>44=440<br>48=480<br>53=530 | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

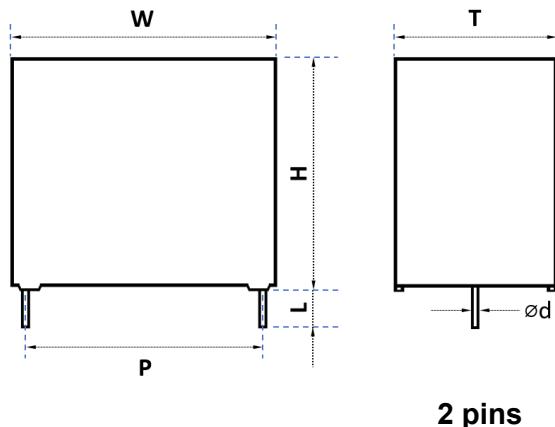
### Terminal Code

| Digit One<br>(Lead/Terminal Type) | Digit Two<br>(Lead Space) |        | Digit Three<br>(Lead Ipsilateral) |        |
|-----------------------------------|---------------------------|--------|-----------------------------------|--------|
| 2 leads for long                  | L                         | 10.0mm | C                                 | 5.1mm  |
| 2 leads for straight cut          | 2                         | 12.5mm | D                                 | 7.5mm  |
| 2 leads for forming cut           | E                         | 15.0mm | E                                 | 10.2mm |
| 4 leads for straight cut          | 4                         | 22.5mm | F                                 | 12.7mm |
| Taping                            | T                         | 27.5mm | G                                 | 20.3mm |
| Taping Straight                   | V                         | N/A    | N                                 | N/A    |

### Lead Length Code

| Lead Length |
|-------------|
| 20mm min    |
| 35mm min    |
| 3.2mm       |
| 3.5mm       |
| 3.0mm       |
| 4.0mm       |
| 5.0mm       |
| 7.0mm       |
| Taping      |
| N/A         |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire       |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | $\varnothing d$ | Tolerance |
| E14       | 18.0      | 0.5       | 11.0 | 0.5       | 5.0  | 0.5       | 15.0  | 0.5       | 0.6             | 0.05      |
| E17       | 18.0      | 0.5       | 12.0 | 0.5       | 6.0  | 0.5       | 15.0  | 0.5       | 0.6             | 0.05      |
| E29       | 18.0      | 0.5       | 13.5 | 0.5       | 7.5  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E34       | 18.0      | 0.5       | 14.5 | 0.5       | 8.5  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E39       | 18.0      | 0.5       | 18.0 | 0.5       | 9.0  | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E43       | 18.0      | 0.5       | 16.0 | 0.5       | 10.0 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E47       | 18.0      | 0.5       | 19.0 | 0.5       | 11.0 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| E52       | 18.0      | 0.5       | 22.0 | 0.5       | 12.5 | 0.5       | 15.0  | 0.5       | 0.8             | 0.05      |
| F14       | 26.0      | 0.5       | 15.5 | 0.5       | 6.0  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F17       | 26.0      | 0.5       | 16.5 | 0.5       | 7.0  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F20       | 26.0      | 0.5       | 17.0 | 0.5       | 8.5  | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F24       | 26.0      | 0.5       | 19.0 | 0.5       | 10.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F26       | 26.0      | 0.5       | 20.0 | 0.5       | 11.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F27       | 26.0      | 0.5       | 22.0 | 0.5       | 12.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F30       | 26.0      | 0.5       | 24.5 | 0.5       | 13.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F34       | 26.0      | 0.5       | 29.5 | 0.5       | 14.5 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| F36       | 26.0      | 0.5       | 25.0 | 0.5       | 15.0 | 0.5       | 22.5  | 0.5       | 0.8             | 0.05      |
| G15       | 32.0      | 0.8       | 18.0 | 0.8       | 9.0  | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G18       | 32.0      | 0.8       | 20.0 | 0.8       | 11.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G21       | 32.0      | 0.8       | 22.0 | 0.8       | 13.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G22       | 32.0      | 0.8       | 24.5 | 0.8       | 13.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G26       | 32.0      | 0.8       | 28.0 | 0.8       | 14.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G27       | 32.0      | 0.8       | 24.5 | 0.8       | 15.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G32       | 32.0      | 0.8       | 30.0 | 0.8       | 16.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G33       | 32.0      | 0.8       | 28.0 | 0.8       | 18.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G34       | 32.0      | 0.8       | 33.0 | 0.8       | 18.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |
| G40       | 32.0      | 0.8       | 37.0 | 0.8       | 22.0 | 0.8       | 27.5  | 0.5       | 0.8             | 0.05      |

**Rating and Part Number**

| Vac | Vdc | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |     |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 350 | 700 | 0.01      | 18         | 11      | 5       | 15      | 5            | 15            | 500   | 0.6       | FXJ35K103E142EL5 |
| 350 | 700 | 0.022     | 18         | 11      | 5       | 15      | 11           | 33            | 500   | 0.6       | FXJ35K223E142EL5 |
| 350 | 700 | 0.033     | 18         | 11      | 5       | 15      | 16.5         | 49.5          | 500   | 0.6       | FXJ35K333E142EL5 |
| 350 | 700 | 0.047     | 18         | 11      | 5       | 15      | 23.5         | 70.5          | 500   | 0.6       | FXJ35K473E142EL5 |
| 350 | 700 | 0.068     | 18         | 12      | 6       | 15      | 34           | 102           | 500   | 0.6       | FXJ35K683E172EL5 |
| 350 | 700 | 0.1       | 18         | 13.5    | 7.5     | 15      | 50           | 150           | 500   | 0.8       | FXJ35K104E292EL5 |
| 350 | 700 | 0.15      | 18         | 14.5    | 8.5     | 15      | 75           | 225           | 500   | 0.8       | FXJ35K154E342EL5 |
| 350 | 700 | 0.22      | 18         | 16      | 10      | 15      | 110          | 330           | 500   | 0.8       | FXJ35K224E432EL5 |
| 350 | 700 | 0.33      | 18         | 19      | 11      | 15      | 165          | 495           | 500   | 0.8       | FXJ35K334E472EL5 |
| 350 | 700 | 0.047     | 26         | 15.5    | 6       | 22.5    | 18.8         | 56.4          | 400   | 0.6       | FXJ35K473F142FL5 |
| 350 | 700 | 0.068     | 26         | 15.5    | 6       | 22.5    | 27.2         | 81.6          | 400   | 0.6       | FXJ35K683F142FL5 |
| 350 | 700 | 0.1       | 26         | 15.5    | 6       | 22.5    | 40           | 120           | 400   | 0.6       | FXJ35K104F142FL5 |
| 350 | 700 | 0.15      | 26         | 15.5    | 6       | 22.5    | 60           | 180           | 400   | 0.6       | FXJ35K154F142FL5 |
| 350 | 700 | 0.22      | 26         | 16.5    | 7       | 22.5    | 88           | 264           | 400   | 0.8       | FXJ35K224F172FL5 |
| 350 | 700 | 0.33      | 26         | 17      | 8.5     | 22.5    | 132          | 396           | 400   | 0.8       | FXJ35K334F202FL5 |
| 350 | 700 | 0.47      | 26         | 19      | 10      | 22.5    | 188          | 564           | 400   | 0.8       | FXJ35K474F242FL5 |
| 350 | 700 | 0.68      | 26         | 22      | 12      | 22.5    | 272          | 816           | 400   | 0.8       | FXJ35K684F272FL5 |
| 350 | 700 | 1         | 26         | 25      | 15      | 22.5    | 400          | 1200          | 400   | 0.8       | FXJ35K105F362FL5 |
| 350 | 700 | 0.15      | 32         | 18      | 9       | 27.5    | 30           | 90            | 200   | 0.8       | FXJ35K154G152GL5 |
| 350 | 700 | 0.22      | 32         | 18      | 9       | 27.5    | 44           | 132           | 200   | 0.8       | FXJ35K224G152GL5 |
| 350 | 700 | 0.33      | 32         | 18      | 9       | 27.5    | 66           | 198           | 200   | 0.8       | FXJ35K334G152GL5 |
| 350 | 700 | 0.47      | 32         | 18      | 9       | 27.5    | 94           | 282           | 200   | 0.8       | FXJ35K474G152GL5 |
| 350 | 700 | 0.68      | 32         | 20      | 11      | 27.5    | 136          | 408           | 200   | 0.8       | FXJ35K684G182GL5 |
| 350 | 700 | 1         | 32         | 22      | 13      | 27.5    | 200          | 600           | 200   | 0.8       | FXJ35K105G212GL5 |
| 350 | 700 | 1.2       | 32         | 28      | 14      | 27.5    | 240          | 720           | 200   | 0.8       | FXJ35K125G262GL5 |
| 350 | 700 | 1.5       | 32         | 30      | 16      | 27.5    | 300          | 900           | 200   | 0.8       | FXJ35K155G322GL5 |
| 350 | 700 | 2.2       | 32         | 33      | 18      | 27.5    | 440          | 1320          | 200   | 0.8       | FXJ35K225G342GL5 |
| 350 | 700 | 3.3       | 32         | 37      | 22      | 27.5    | 660          | 1980          | 200   | 0.8       | FXJ35K335G402GL5 |

**Rating and Part Number**

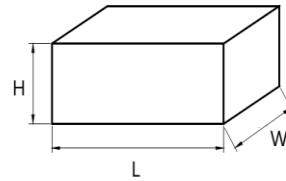
| Vac | Vdc  | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 480 | 1000 | 0.01      | 18         | 11      | 5       | 15      | 6            | 18            | 600   | 0.6       | FXJ48K103E142EL5 |
| 480 | 1000 | 0.015     | 18         | 11      | 5       | 15      | 9            | 27            | 600   | 0.6       | FXJ48K153E142EL5 |
| 480 | 1000 | 0.018     | 18         | 11      | 5       | 15      | 10.8         | 32.4          | 600   | 0.6       | FXJ48K183E142EL5 |
| 480 | 1000 | 0.022     | 18         | 11      | 5       | 15      | 13.2         | 39.6          | 600   | 0.6       | FXJ48K223E142EL5 |
| 480 | 1000 | 0.033     | 18         | 11      | 5       | 15      | 19.8         | 59.4          | 600   | 0.6       | FXJ48K333E142EL5 |
| 480 | 1000 | 0.047     | 18         | 12      | 6       | 15      | 28.2         | 84.6          | 600   | 0.6       | FXJ48K473E172EL5 |
| 480 | 1000 | 0.068     | 18         | 13.5    | 7.5     | 15      | 40.8         | 122.4         | 600   | 0.8       | FXJ48K683E292EL5 |
| 480 | 1000 | 0.1       | 18         | 14.5    | 8.5     | 15      | 60           | 180           | 600   | 0.8       | FXJ48K104E342EL5 |
| 480 | 1000 | 0.15      | 18         | 19      | 11      | 15      | 90           | 270           | 600   | 0.8       | FXJ48K154E472EL5 |
| 480 | 1000 | 0.22      | 18         | 22      | 12.5    | 15      | 132          | 396           | 600   | 0.8       | FXJ48K224E522EL5 |
| 480 | 1000 | 0.047     | 26         | 15.5    | 6       | 22.5    | 14.1         | 42.3          | 300   | 0.6       | FXJ48K473F142FL5 |
| 480 | 1000 | 0.056     | 26         | 15.5    | 6       | 22.5    | 16.8         | 50.4          | 300   | 0.6       | FXJ48K563F142FL5 |
| 480 | 1000 | 0.068     | 26         | 15.5    | 6       | 22.5    | 20.4         | 61.2          | 300   | 0.6       | FXJ48K683F142FL5 |
| 480 | 1000 | 0.082     | 26         | 15.5    | 6       | 22.5    | 24.6         | 73.8          | 300   | 0.6       | FXJ48K823F142FL5 |
| 480 | 1000 | 0.1       | 26         | 15.5    | 6       | 22.5    | 30           | 90            | 300   | 0.6       | FXJ48K104F142FL5 |
| 480 | 1000 | 0.15      | 26         | 16.5    | 7       | 22.5    | 45           | 135           | 300   | 0.8       | FXJ48K154F172FL5 |
| 480 | 1000 | 0.22      | 26         | 17      | 8.5     | 22.5    | 66           | 198           | 300   | 0.8       | FXJ48K224F202FL5 |
| 480 | 1000 | 0.33      | 26         | 20      | 11      | 22.5    | 99           | 297           | 300   | 0.8       | FXJ48K334F262FL5 |
| 480 | 1000 | 0.47      | 26         | 24.5    | 13      | 22.5    | 141          | 423           | 300   | 0.8       | FXJ48K474F302FL5 |
| 480 | 1000 | 0.56      | 26         | 25      | 15      | 22.5    | 168          | 504           | 300   | 0.8       | FXJ48K564F362FL5 |
| 480 | 1000 | 0.68      | 26         | 29.5    | 14.5    | 22.5    | 204          | 612           | 300   | 0.8       | FXJ48K684F342FL5 |
| 480 | 1000 | 0.15      | 32         | 18      | 9       | 27.5    | 30           | 90            | 200   | 0.8       | FXJ48K154G152GL5 |
| 480 | 1000 | 0.22      | 32         | 18      | 9       | 27.5    | 44           | 132           | 200   | 0.8       | FXJ48K224G152GL5 |
| 480 | 1000 | 0.33      | 32         | 18      | 9       | 27.5    | 66           | 198           | 200   | 0.8       | FXJ48K334G152GL5 |
| 480 | 1000 | 0.47      | 32         | 20      | 11      | 27.5    | 94           | 282           | 200   | 0.8       | FXJ48K474G182GL5 |
| 480 | 1000 | 0.56      | 32         | 22      | 13      | 27.5    | 112          | 336           | 200   | 0.8       | FXJ48K564G212GL5 |
| 480 | 1000 | 0.68      | 32         | 24.5    | 13      | 27.5    | 136          | 408           | 200   | 0.8       | FXJ48K684G222GL5 |
| 480 | 1000 | 0.82      | 32         | 28      | 14      | 27.5    | 164          | 492           | 200   | 0.8       | FXJ48K824G262GL5 |
| 480 | 1000 | 1         | 32         | 28      | 18      | 27.5    | 200          | 600           | 200   | 0.8       | FXJ48K105G332GL5 |
| 480 | 1000 | 1.2       | 32         | 33      | 18      | 27.5    | 240          | 720           | 200   | 0.8       | FXJ48K125G342GL5 |
| 480 | 1000 | 1.5       | 32         | 33      | 18      | 27.5    | 300          | 900           | 200   | 0.8       | FXJ48K155G342GL5 |
| 480 | 1000 | 1.8       | 32         | 37      | 22      | 27.5    | 360          | 1080          | 200   | 0.8       | FXJ48K185G402GL5 |

### Rating and Part Number

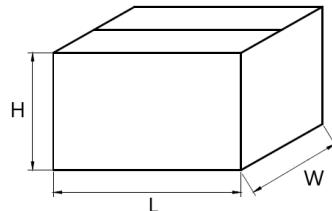
| Vac | Vdc  | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 530 | 1100 | 0.0068    | 18         | 11      | 5       | 15      | 4.08         | 12.24         | 600   | 0.6       | FXJ53K682E142EL5 |
| 530 | 1100 | 0.0082    | 18         | 11      | 5       | 15      | 4.92         | 14.76         | 600   | 0.6       | FXJ53K822E142EL5 |
| 530 | 1100 | 0.01      | 18         | 11      | 5       | 15      | 6            | 18            | 600   | 0.6       | FXJ53K103E142EL5 |
| 530 | 1100 | 0.022     | 18         | 12      | 6       | 15      | 13.2         | 39.6          | 600   | 0.6       | FXJ53K223E172EL5 |
| 530 | 1100 | 0.033     | 18         | 13.5    | 7.5     | 15      | 19.8         | 59.4          | 600   | 0.8       | FXJ53K334E292EL5 |
| 530 | 1100 | 0.047     | 18         | 14.5    | 8.5     | 15      | 28.2         | 84.6          | 600   | 0.8       | FXJ53K473E342EL5 |
| 530 | 1100 | 0.056     | 18         | 14.5    | 8.5     | 15      | 33.6         | 100.8         | 600   | 0.8       | FXJ53K563E342EL5 |
| 530 | 1100 | 0.068     | 18         | 18      | 9       | 15      | 40.8         | 122.4         | 600   | 0.8       | FXJ53K683E392EL5 |
| 530 | 1100 | 0.1       | 18         | 19      | 11      | 15      | 60           | 180           | 600   | 0.8       | FXJ53K104E472EL5 |
| 530 | 1100 | 0.033     | 26         | 15.5    | 6       | 22.5    | 9.9          | 29.7          | 300   | 0.6       | FXJ53K333F142FL5 |
| 530 | 1100 | 0.047     | 26         | 15.5    | 6       | 22.5    | 14.1         | 42.3          | 300   | 0.6       | FXJ53K473F142FL5 |
| 530 | 1100 | 0.056     | 26         | 15.5    | 6       | 22.5    | 16.8         | 50.4          | 300   | 0.6       | FXJ53K563F142FL5 |
| 530 | 1100 | 0.068     | 26         | 15.5    | 6       | 22.5    | 20.4         | 61.2          | 300   | 0.6       | FXJ53K683F142FL5 |
| 530 | 1100 | 0.082     | 26         | 15.5    | 6       | 22.5    | 24.6         | 73.8          | 300   | 0.6       | FXJ53M823F142FL5 |
| 530 | 1100 | 0.1       | 26         | 16.5    | 7       | 22.5    | 30           | 90            | 300   | 0.8       | FXJ53K104F172FL5 |
| 530 | 1100 | 0.15      | 26         | 17      | 8.5     | 22.5    | 45           | 135           | 300   | 0.8       | FXJ53K154F202FL5 |
| 530 | 1100 | 0.22      | 26         | 19      | 10      | 22.5    | 66           | 198           | 300   | 0.8       | FXJ53K224F242FL5 |
| 530 | 1100 | 0.33      | 26         | 22      | 12      | 22.5    | 99           | 297           | 300   | 0.8       | FXJ53K334F272FL5 |
| 530 | 1100 | 0.47      | 26         | 29.5    | 14.5    | 22.5    | 141          | 423           | 300   | 0.8       | FXJ53K474F342FL5 |
| 530 | 1100 | 0.15      | 32         | 20      | 11      | 27.5    | 30           | 90            | 200   | 0.8       | FXJ53K154G182GL5 |
| 530 | 1100 | 0.22      | 32         | 20      | 11      | 27.5    | 44           | 132           | 200   | 0.8       | FXJ53K224G182GL5 |
| 530 | 1100 | 0.33      | 32         | 20      | 11      | 27.5    | 66           | 198           | 200   | 0.8       | FXJ53K334G182GL5 |
| 530 | 1100 | 0.47      | 32         | 22      | 13      | 27.5    | 94           | 282           | 200   | 0.8       | FXJ53K474G212GL5 |
| 530 | 1100 | 0.47      | 32         | 24.5    | 13      | 27.5    | 94           | 282           | 200   | 0.8       | FXJ53K474G222GL5 |
| 530 | 1100 | 0.56      | 32         | 24.5    | 13      | 27.5    | 112          | 336           | 200   | 0.8       | FXJ53K564G222GL5 |
| 530 | 1100 | 0.68      | 32         | 24.5    | 15      | 27.5    | 136          | 408           | 200   | 0.8       | FXJ53K684G272GL5 |
| 530 | 1100 | 0.68      | 32         | 28      | 18      | 27.5    | 136          | 408           | 200   | 0.8       | FXJ53K684G332GL5 |
| 530 | 1100 | 0.82      | 32         | 28      | 18      | 27.5    | 164          | 492           | 200   | 0.8       | FXJ53K824G332GL5 |
| 530 | 1100 | 1         | 32         | 33      | 18      | 27.5    | 200          | 600           | 200   | 0.8       | FXJ53K105G342GL5 |
| 530 | 1100 | 1.5       | 32         | 37      | 22      | 27.5    | 300          | 900           | 200   | 0.8       | FXJ53K155G402GL5 |
| 530 | 1100 | 1.8       | 32         | 37      | 22      | 27.5    | 360          | 1080          | 200   | 0.8       | FXJ53M185G402GL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 50     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 50     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



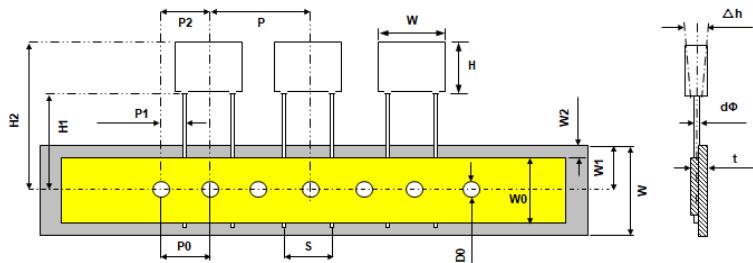
### Packaging Quantity

| Pitch | Size Code | Dimension |      |      | Packaging Quantity |             |           |
|-------|-----------|-----------|------|------|--------------------|-------------|-----------|
|       |           | W         | H    | T    | Long Leads         | Short Leads | Ammo Pack |
| 15    | E14       | 18        | 11   | 5    | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6    | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5  | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5  | 600                | 612         | 390       |
|       | E39       | 18        | 18   | 9    | 600                | 578         | 370       |
|       | E43       | 18        | 16   | 10   | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11   | 600                | 476         | 300       |
|       | E52       | 18        | 22   | 12.5 | 600                | 408         | 260       |
| 22.5  | F14       | 26        | 15.5 | 6    |                    | 612         | 350       |
|       | F17       | 26        | 16.5 | 7    |                    | 528         | 300       |
|       | F20       | 26        | 17   | 8.5  |                    | 432         | 250       |
|       | F24       | 26        | 19   | 10   |                    | 372         | 210       |
|       | F26       | 26        | 20   | 11   |                    | 336         | 190       |
|       | F27       | 26        | 22   | 12   |                    | 300         | 170       |
|       | F30       | 26        | 24.5 | 13   |                    | 276         | 160       |
|       | F34       | 26        | 29.5 | 14.5 |                    | 252         | 140       |
|       | F36       | 26        | 25   | 15   |                    | 240         | 140       |
| 27.5  | G15       | 32        | 18   | 9    |                    | 340         | 230       |
|       | G18       | 32        | 20   | 11   |                    | 280         | 190       |
|       | G21       | 32        | 22   | 13   |                    | 230         | 160       |
|       | G22       | 32        | 24.5 | 13   |                    | 230         | 160       |
|       | G26       | 32        | 28   | 14   |                    | 220         | 150       |
|       | G27       | 32        | 24.5 | 15   |                    | 200         | 140       |
|       | G32       | 32        | 30   | 16   |                    | 190         | 130       |
|       | G33       | 32        | 28   | 18   |                    | 170         | 110       |
|       | G34       | 32        | 33   | 18   |                    | 170         | 110       |
|       | G40       | 32        | 37   | 22   |                    | 140         | 90        |

## Lead Taping Information

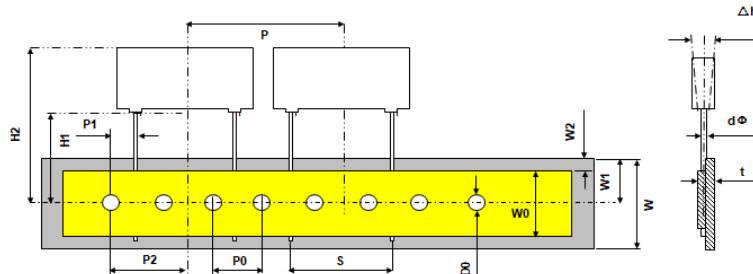
### Taping Style: Straight leads

Lead spacing: 10 - 15mm



Quantity: 10pcs / line

Lead spacing: 22.5mm



Quantity: 6pcs / line

### Taping Specification

| Description                          | Symbol | Dimension (mm) |      |      |      | Tolerance |
|--------------------------------------|--------|----------------|------|------|------|-----------|
| Lead Spacing                         | S      | 10.0           | 12.5 | 15.0 | 22.5 | +0.8/-0.2 |
| Taping Pitch                         | P      | 25.4           | 25.4 | 25.4 | 38.0 | ±1.0      |
| Feed Hole Pitch                      | P0     | 12.7           | 12.7 | 12.7 | 12.7 | ±0.2      |
| Centering of Lead Wire               | P1     | 7.7            | 6.5  | 5.2  | 7.80 | ±0.7      |
| Centering of Body                    | P2     | 12.7           | 12.7 | 12.7 | 19.1 | ±1.3      |
| Carrier Tape Width                   | W      | 18.0           | 18.0 | 18.0 | 18.0 | ±0.5      |
| Hold Down Tape Width                 | W0     | 9.5            | 9.5  | 9.5  | 9.5  | minimum   |
| Hole Position                        | W1     | 9.0            | 9.0  | 9.0  | 9.0  | ±0.5      |
| Hold Down Tape Position              | W2     | 3.0            | 3.0  | 3.0  | 3.0  | maximum   |
| Feed Hole Diameter                   | D0     | 4.0            | 4.0  | 4.0  | 4.0  | ±0.2      |
| Height of Component From Tape Center | H1     | 20.0           | 20.0 | 20.0 | 20.0 | ±0.5      |
| Top Edge of Component                | H2     | 39.0           | 39.0 | 39.0 | 44.0 | maximum   |
| Lead Wire Diameter                   | d      | 0.6            | 0.8  | 0.8  | 0.8  | ±0.1      |
| Component Alignment                  | Δh     | 0.0            | 0.0  | 0.0  | 0.0  | ±2.0      |
| Tape Thickness                       | t      | 0.7            | 0.7  | 0.7  | 0.7  | ±0.2      |

## Overview

The FY1 series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0.

## Applications

Use in EMI filter in line-to-ground and double insulation applications requiring Y1 safety classification.

## Features

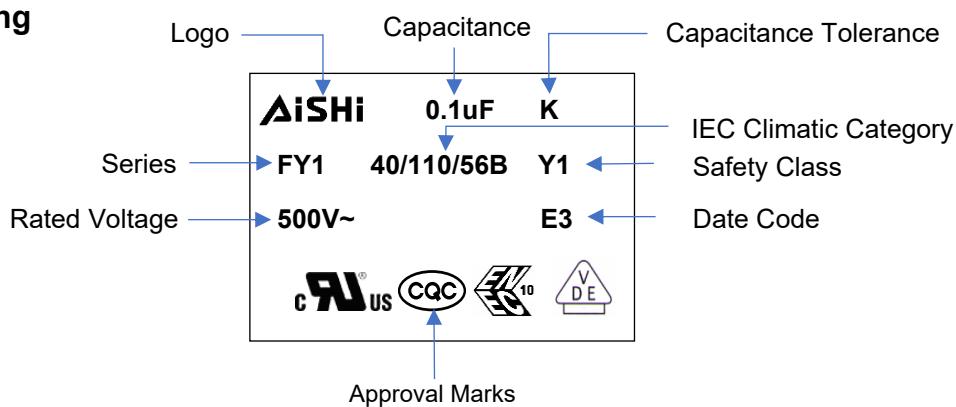
- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Lead space: 15mm~27.5mm
- Capacitance range: 0.00047μF ~ 0.1μF



## Approvals

| Marking | Standard   | File Number |
|---------|--|-------------|
|         | UL 60384-14<br>CAN/CSA-E60384-14                 | Pending     |
|         | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | Pending     |
|         | IEC 60384-14:2013+AMD1:2016<br>CQC11-471112-2015 | Pending     |

## Marking



### Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

### Part Number System

| F              | Y1                                 | 50            | K                    | 103   | E47                      | 2EL                          | 5                          |
|----------------|------------------------------------|---------------|----------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series                             | Voltage (VAC) | Tolerance            | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | Class Y1,<br>Metallized<br>PP Film | 50=500Vac     | K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

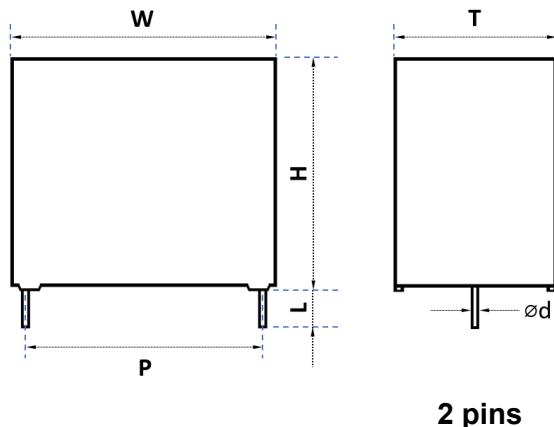
### Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead IpsiLateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 10.0mm                    | C | 5.1mm                             | A |
| 2 leads for straight cut          | 2 | 15.0mm                    | E | 7.5mm                             | C |
| 2 leads for forming cut           | E | 22.5mm                    | F | 10.2mm                            | B |
| 4 leads for straight cut          | 4 | 27.5mm                    | G | 12.7mm                            | G |
| Taping                            | T | 37.5mm                    | K | 20.3mm                            | D |
| Taping Straight                   | V | N/A                       | N | N/A                               | L |

### Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

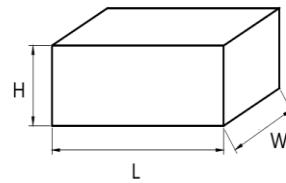
| Size | Dimension |    |           |      |           |     | Pitch     |      | Lead Wire |     |           |
|------|-----------|----|-----------|------|-----------|-----|-----------|------|-----------|-----|-----------|
|      | Code      | W  | Tolerance | H    | Tolerance | T   | Tolerance | P    | Tolerance | Ød  | Tolerance |
| E14  |           | 18 | 0.5       | 11   | 0.5       | 5   | 0.5       | 15   | 0.5       | 0.6 | 0.05      |
| E17  |           | 18 | 0.5       | 12   | 0.5       | 6   | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E29  |           | 18 | 0.5       | 13.5 | 0.5       | 7.5 | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E34  |           | 18 | 0.5       | 14.5 | 0.5       | 8.5 | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E43  |           | 18 | 0.5       | 16   | 0.5       | 10  | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E47  |           | 18 | 0.5       | 19   | 0.5       | 11  | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| F14  |           | 26 | 0.5       | 15.5 | 0.5       | 6   | 0.5       | 22.5 | 0.5       | 0.6 | 0.05      |
| F17  |           | 26 | 0.5       | 16.5 | 0.5       | 7   | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F20  |           | 26 | 0.5       | 17   | 0.5       | 8.5 | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F24  |           | 26 | 0.5       | 19   | 0.5       | 10  | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F26  |           | 26 | 0.5       | 20   | 0.5       | 11  | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F27  |           | 26 | 0.5       | 22   | 0.5       | 12  | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| G15  |           | 32 | 0.8       | 18   | 0.8       | 9   | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G18  |           | 32 | 0.8       | 20   | 0.8       | 11  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G21  |           | 32 | 0.8       | 22   | 0.8       | 13  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G26  |           | 32 | 0.8       | 28   | 0.8       | 14  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G27  |           | 32 | 0.8       | 24.5 | 0.8       | 15  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G32  |           | 32 | 0.8       | 30   | 0.8       | 16  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G34  |           | 32 | 0.8       | 33   | 0.8       | 18  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G40  |           | 32 | 0.8       | 37   | 0.8       | 22  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |

## Rating and Part Number

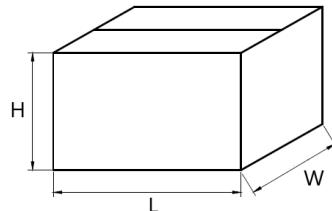
| Vac | Vdc  | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 500 | 3000 | 0.00047   | 18         | 11      | 5       | 15      | 0.94         | 2.82          | 2000  | 0.6       | FY150K471E142EL5 |
| 500 | 3000 | 0.00056   | 18         | 11      | 5       | 15      | 1.12         | 3.36          | 2000  | 0.6       | FY150K561E142EL5 |
| 500 | 3000 | 0.00068   | 18         | 11      | 5       | 15      | 1.36         | 4.08          | 2000  | 0.6       | FY150K681E142EL5 |
| 500 | 3000 | 0.00082   | 18         | 11      | 5       | 15      | 1.64         | 4.92          | 2000  | 0.6       | FY150K821E142EL5 |
| 500 | 3000 | 0.001     | 18         | 11      | 5       | 15      | 2            | 6             | 2000  | 0.6       | FY150K102E142EL5 |
| 500 | 3000 | 0.0012    | 18         | 11      | 5       | 15      | 2.4          | 7.2           | 2000  | 0.6       | FY150K122E142EL5 |
| 500 | 3000 | 0.0015    | 18         | 11      | 5       | 15      | 75           | 225           | 2000  | 0.6       | FY150K152E142EL5 |
| 500 | 3000 | 0.0018    | 18         | 12      | 6       | 15      | 3.6          | 10.8          | 2000  | 0.6       | FY150K182E172EL5 |
| 500 | 3000 | 0.0020    | 18         | 12      | 6       | 15      | 4            | 12            | 2000  | 0.6       | FY150K202E172EL5 |
| 500 | 3000 | 0.0022    | 18         | 12      | 6       | 15      | 4.4          | 13.2          | 2000  | 0.6       | FY150K222E172EL5 |
| 500 | 3000 | 0.0025    | 18         | 12      | 6       | 15      | 5            | 15            | 2000  | 0.6       | FY150K252E172EL5 |
| 500 | 3000 | 0.0027    | 18         | 13.5    | 7.5     | 15      | 5.4          | 16.2          | 2000  | 0.8       | FY150K272E292EL5 |
| 500 | 3000 | 0.0030    | 18         | 13.5    | 7.5     | 15      | 6            | 18            | 2000  | 0.8       | FY150K302E292EL5 |
| 500 | 3000 | 0.0033    | 18         | 13.5    | 7.5     | 15      | 6.6          | 19.8          | 2000  | 0.8       | FY150K332E292EL5 |
| 500 | 3000 | 0.0039    | 18         | 13.5    | 7.5     | 15      | 7.8          | 23.4          | 2000  | 0.8       | FY150K392E292EL5 |
| 500 | 3000 | 0.0040    | 18         | 13.5    | 7.5     | 15      | 8            | 24            | 2000  | 0.8       | FY150K402E292EL5 |
| 500 | 3000 | 0.0047    | 18         | 14.5    | 8.5     | 15      | 9.4          | 28.2          | 2000  | 0.8       | FY150K472E342EL5 |
| 500 | 3000 | 0.0050    | 18         | 14.5    | 8.5     | 15      | 10           | 30            | 2000  | 0.8       | FY150K502E342EL5 |
| 500 | 3000 | 0.0056    | 18         | 14.5    | 8.5     | 15      | 11.2         | 33.6          | 2000  | 0.8       | FY150K562E342EL5 |
| 500 | 3000 | 0.0068    | 18         | 16      | 10      | 15      | 13.6         | 40.8          | 2000  | 0.8       | FY150K682E432EL5 |
| 500 | 3000 | 0.0082    | 18         | 19      | 11      | 15      | 16.4         | 49.2          | 2000  | 0.8       | FY150K822E472EL5 |
| 500 | 3000 | 0.01      | 18         | 19      | 11      | 15      | 20           | 60            | 2000  | 0.8       | FY150K103E472EL5 |
| 500 | 3000 | 0.0056    | 26         | 15.5    | 6       | 22.5    | 8.4          | 25.2          | 1500  | 0.6       | FY150K562F142FL5 |
| 500 | 3000 | 0.0068    | 26         | 16.5    | 7       | 22.5    | 10.2         | 30.6          | 1500  | 0.8       | FY150K682F172FL5 |
| 500 | 3000 | 0.0082    | 26         | 17      | 8.5     | 22.5    | 12.3         | 36.9          | 1500  | 0.8       | FY150K822F202FL5 |
| 500 | 3000 | 0.01      | 26         | 17      | 8.5     | 22.5    | 15           | 45            | 1500  | 0.8       | FY150K103F202FL5 |
| 500 | 3000 | 0.012     | 26         | 19      | 10      | 22.5    | 18           | 54            | 1500  | 0.8       | FY150K123F242FL5 |
| 500 | 3000 | 0.015     | 26         | 19      | 10      | 22.5    | 22.5         | 67.5          | 1500  | 0.8       | FY150K153F242FL5 |
| 500 | 3000 | 0.018     | 26         | 20      | 11      | 22.5    | 27           | 81            | 1500  | 0.8       | FY150K183F262FL5 |
| 500 | 3000 | 0.022     | 26         | 22      | 12      | 22.5    | 33           | 99            | 1500  | 0.8       | FY150K223F272FL5 |
| 500 | 3000 | 0.022     | 32         | 20      | 11      | 27.5    | 17.6         | 52.8          | 800   | 0.8       | FY150K223G182GL5 |
| 500 | 3000 | 0.033     | 32         | 22      | 13      | 27.5    | 26.4         | 79.2          | 800   | 0.8       | FY150K333G212GL5 |
| 500 | 3000 | 0.047     | 32         | 28      | 14      | 27.5    | 37.6         | 112.8         | 800   | 0.8       | FY150K473G262GL5 |
| 500 | 3000 | 0.068     | 32         | 33      | 18      | 27.5    | 54.4         | 163.2         | 800   | 0.8       | FY150K683G342GL5 |
| 500 | 3000 | 0.1       | 32         | 37      | 22      | 27.5    | 80           | 240           | 800   | 1.0       | FY150K104G402GL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 50     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 50     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



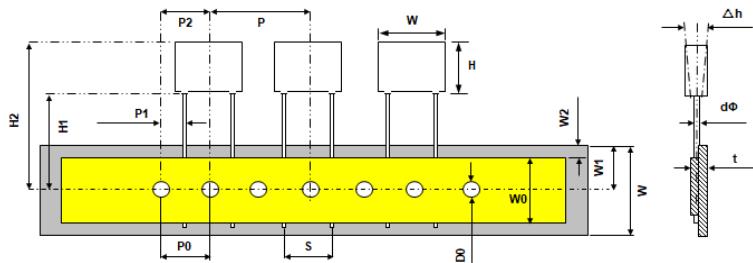
### Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F14       | 26        | 15.5 | 6   | 612                | 612         | 350       |
|       | F17       | 26        | 16.5 | 7   | 528                | 528         | 300       |
|       | F20       | 26        | 17   | 8.5 | 432                | 432         | 250       |
|       | F24       | 26        | 19   | 10  | 372                | 372         | 210       |
|       | F26       | 26        | 20   | 11  | 336                | 336         | 190       |
|       | F27       | 26        | 22   | 12  | 300                | 300         | 170       |
| 27.5  | G15       | 32        | 18   | 9   | 340                | 340         |           |
|       | G18       | 32        | 20   | 11  | 280                | 280         |           |
|       | G21       | 32        | 22   | 13  | 230                | 230         |           |
|       | G26       | 32        | 28   | 14  | 220                | 220         |           |
|       | G27       | 32        | 24.5 | 15  | 200                | 200         |           |
|       | G32       | 32        | 30   | 16  | 190                | 190         |           |
|       | G33       | 32        | 28   | 18  | 170                | 170         |           |
|       | G34       | 32        | 33   | 18  | 170                | 170         |           |
|       | G40       | 32        | 37   | 22  | 140                | 140         |           |

## Lead Taping Information

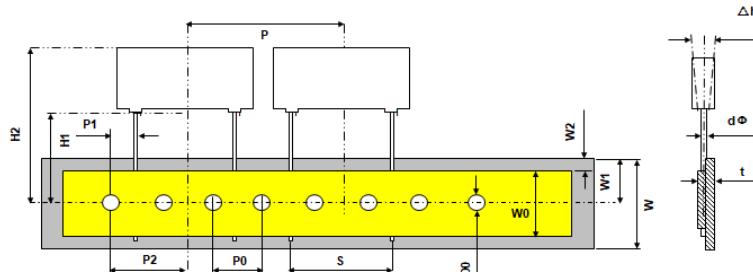
### Taping Style: Straight leads

Lead spacing: 10 - 15mm



Quantity: 10pcs / line

Lead spacing: 22.5 – 27.5mm



Quantity: 6pcs / line

### Taping Specification

| Description                          | Symbol | Dimension (mm) |      |      |      | Tolerance |
|--------------------------------------|--------|----------------|------|------|------|-----------|
| Lead Spacing                         | S      | 10.0           | 12.5 | 15.0 | 22.5 | +0.8/-0.2 |
| Taping Pitch                         | P      | 25.4           | 25.4 | 25.4 | 38.0 | ±1.0      |
| Feed Hole Pitch                      | P0     | 12.7           | 12.7 | 12.7 | 12.7 | ±0.2      |
| Centering of Lead Wire               | P1     | 7.7            | 6.5  | 5.2  | 7.80 | ±0.7      |
| Centering of Body                    | P2     | 12.7           | 12.7 | 12.7 | 19.1 | ±1.3      |
| Carrier Tape Width                   | W      | 18.0           | 18.0 | 18.0 | 18.0 | ±0.5      |
| Hold Down Tape Width                 | W0     | 9.5            | 9.5  | 9.5  | 9.5  | minimum   |
| Hole Position                        | W1     | 9.0            | 9.0  | 9.0  | 9.0  | ±0.5      |
| Hold Down Tape Position              | W2     | 3.0            | 3.0  | 3.0  | 3.0  | maximum   |
| Feed Hole Diameter                   | D0     | 4.0            | 4.0  | 4.0  | 4.0  | ±0.2      |
| Height of Component From Tape Center | H1     | 20.0           | 20.0 | 20.0 | 20.0 | ±0.5      |
| Top Edge of Component                | H2     | 39.0           | 39.0 | 39.0 | 44.0 | maximum   |
| Lead Wire Diameter                   | d      | 0.6            | 0.8  | 0.8  | 0.8  | ±0.1      |
| Component Alignment                  | Δh     | 0.0            | 0.0  | 0.0  | 0.0  | ±2.0      |
| Tape Thickness                       | t      | 0.7            | 0.7  | 0.7  | 0.7  | ±0.2      |

## Overview

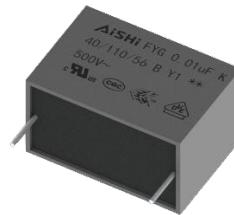
The FY1 series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0. This FYG series robustness design is suitable for high humidity and high temperature environmental conditions and compliant to THB Grade IIIB.

## Applications

Use in EMI filter in line-to-ground and double insulation applications requiring Y1 safety classification.

## Features

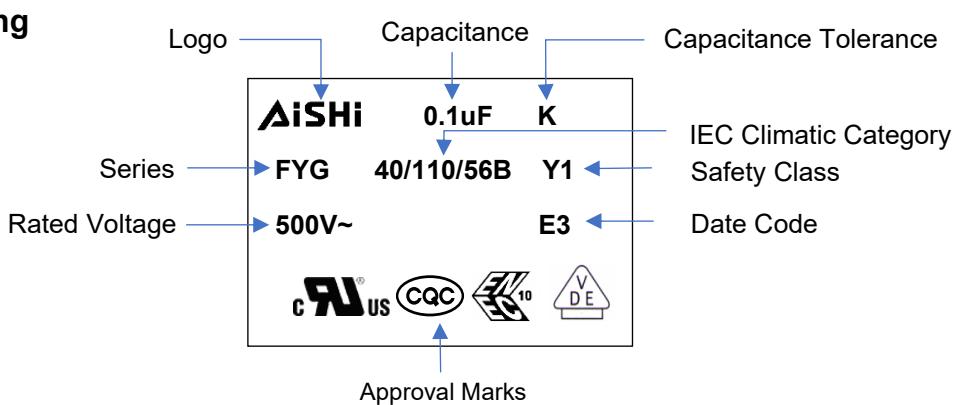
- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Lead space: 15mm~27.5mm
- Capacitance range: 0.00047μF ~ 0.1μF
- Suitable for harsh environment conditions
- THB Grade IIIB (85°C 85%RH 1.0U<sub>RAC</sub> for 1000 hours)



## Approvals

| Marking | Standard   | File Number |
|---------|--|-------------|
|         | UL 60384-14<br>CAN/CSA-E60384-14                 | Pending     |
|         | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | Pending     |
|         | IEC 60384-14:2013+AMD1:2016<br>CQC11-471112-2015 | Pending     |

## Marking



### Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

### Part Number System

| F              | YG   | 50            | K                    | 103   | E47                      | 2EL                          | 5                          |
|----------------|--|---------------|----------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series                                     | Voltage (VAC) | Tolerance            | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | Class Y1,<br>THB,<br>Metallized<br>PP Film | 50=500Vac     | K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

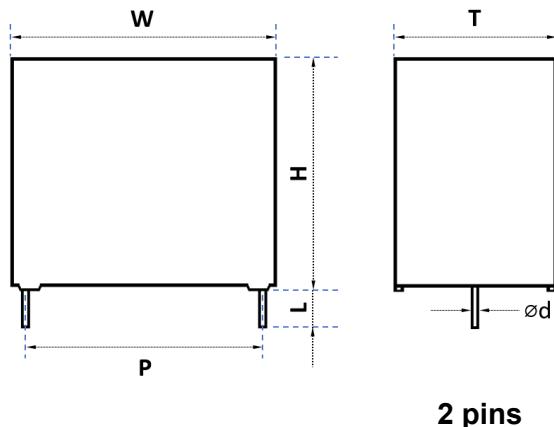
### Terminal Code

| Digit One<br>(Lead/Terminal Type) | Digit Two<br>(Lead Space) |        | Digit Three<br>(Lead Ipsilateral) |        |
|-----------------------------------|---------------------------|--------|-----------------------------------|--------|
| 2 leads for long                  | L                         | 10.0mm | C                                 | 5.1mm  |
| 2 leads for straight cut          | 2                         | 15.0mm | E                                 | 7.5mm  |
| 2 leads for forming cut           | E                         | 22.5mm | F                                 | 10.2mm |
| 4 leads for straight cut          | 4                         | 27.5mm | G                                 | 12.7mm |
| Taping                            | T                         | 37.5mm | K                                 | 20.3mm |
| Taping Straight                   | V                         | N/A    | N                                 | N/A    |

### Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

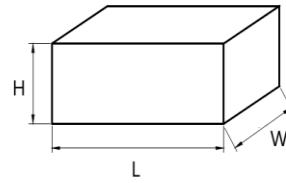
| Size | Dimension |    |           |      |           |     | Pitch     |      | Lead Wire |     |           |
|------|-----------|----|-----------|------|-----------|-----|-----------|------|-----------|-----|-----------|
|      | Code      | W  | Tolerance | H    | Tolerance | T   | Tolerance | P    | Tolerance | Ød  | Tolerance |
| E14  |           | 18 | 0.5       | 11   | 0.5       | 5   | 0.5       | 15   | 0.5       | 0.6 | 0.05      |
| E17  |           | 18 | 0.5       | 12   | 0.5       | 6   | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E29  |           | 18 | 0.5       | 13.5 | 0.5       | 7.5 | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E34  |           | 18 | 0.5       | 14.5 | 0.5       | 8.5 | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E43  |           | 18 | 0.5       | 16   | 0.5       | 10  | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E47  |           | 18 | 0.5       | 19   | 0.5       | 11  | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| F14  |           | 26 | 0.5       | 15.5 | 0.5       | 6   | 0.5       | 22.5 | 0.5       | 0.6 | 0.05      |
| F17  |           | 26 | 0.5       | 16.5 | 0.5       | 7   | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F20  |           | 26 | 0.5       | 17   | 0.5       | 8.5 | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F24  |           | 26 | 0.5       | 19   | 0.5       | 10  | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F26  |           | 26 | 0.5       | 20   | 0.5       | 11  | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F27  |           | 26 | 0.5       | 22   | 0.5       | 12  | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| G15  |           | 32 | 0.8       | 18   | 0.8       | 9   | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G18  |           | 32 | 0.8       | 20   | 0.8       | 11  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G21  |           | 32 | 0.8       | 22   | 0.8       | 13  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G26  |           | 32 | 0.8       | 28   | 0.8       | 14  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G27  |           | 32 | 0.8       | 24.5 | 0.8       | 15  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G32  |           | 32 | 0.8       | 30   | 0.8       | 16  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G34  |           | 32 | 0.8       | 33   | 0.8       | 18  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G40  |           | 32 | 0.8       | 37   | 0.8       | 22  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |

## Rating and Part Number

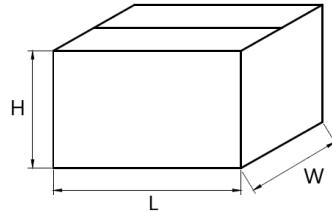
| Vac | Vdc  | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 500 | 3000 | 0.00047   | 18         | 11      | 5       | 15      | 0.94         | 2.82          | 2000  | 0.6       | FYG50K471E142EL5 |
| 500 | 3000 | 0.00056   | 18         | 11      | 5       | 15      | 1.12         | 3.36          | 2000  | 0.6       | FYG50K561E142EL5 |
| 500 | 3000 | 0.00068   | 18         | 11      | 5       | 15      | 1.36         | 4.08          | 2000  | 0.6       | FYG50K681E142EL5 |
| 500 | 3000 | 0.00082   | 18         | 11      | 5       | 15      | 1.64         | 4.92          | 2000  | 0.6       | FYG50K821E142EL5 |
| 500 | 3000 | 0.001     | 18         | 11      | 5       | 15      | 2            | 6             | 2000  | 0.6       | FYG50K102E142EL5 |
| 500 | 3000 | 0.0012    | 18         | 11      | 5       | 15      | 2.4          | 7.2           | 2000  | 0.6       | FYG50K122E142EL5 |
| 500 | 3000 | 0.0015    | 18         | 11      | 5       | 15      | 75           | 225           | 2000  | 0.6       | FYG50K152E142EL5 |
| 500 | 3000 | 0.0018    | 18         | 12      | 6       | 15      | 3.6          | 10.8          | 2000  | 0.6       | FYG50K182E172EL5 |
| 500 | 3000 | 0.0020    | 18         | 12      | 6       | 15      | 4            | 12            | 2000  | 0.6       | FYG50K202E172EL5 |
| 500 | 3000 | 0.0022    | 18         | 12      | 6       | 15      | 4.4          | 13.2          | 2000  | 0.6       | FYG50K222E172EL5 |
| 500 | 3000 | 0.0025    | 18         | 12      | 6       | 15      | 5            | 15            | 2000  | 0.6       | FYG50K252E172EL5 |
| 500 | 3000 | 0.0027    | 18         | 13.5    | 7.5     | 15      | 5.4          | 16.2          | 2000  | 0.8       | FYG50K272E292EL5 |
| 500 | 3000 | 0.0030    | 18         | 13.5    | 7.5     | 15      | 6            | 18            | 2000  | 0.8       | FYG50K302E292EL5 |
| 500 | 3000 | 0.0033    | 18         | 13.5    | 7.5     | 15      | 6.6          | 19.8          | 2000  | 0.8       | FYG50K332E292EL5 |
| 500 | 3000 | 0.0039    | 18         | 13.5    | 7.5     | 15      | 7.8          | 23.4          | 2000  | 0.8       | FYG50K392E292EL5 |
| 500 | 3000 | 0.0040    | 18         | 13.5    | 7.5     | 15      | 8            | 24            | 2000  | 0.8       | FYG50K402E292EL5 |
| 500 | 3000 | 0.0047    | 18         | 14.5    | 8.5     | 15      | 9.4          | 28.2          | 2000  | 0.8       | FYG50K472E342EL5 |
| 500 | 3000 | 0.0050    | 18         | 14.5    | 8.5     | 15      | 10           | 30            | 2000  | 0.8       | FYG50K502E342EL5 |
| 500 | 3000 | 0.0056    | 18         | 14.5    | 8.5     | 15      | 11.2         | 33.6          | 2000  | 0.8       | FYG50K562E342EL5 |
| 500 | 3000 | 0.0068    | 18         | 16      | 10      | 15      | 13.6         | 40.8          | 2000  | 0.8       | FYG50K682E432EL5 |
| 500 | 3000 | 0.0082    | 18         | 19      | 11      | 15      | 16.4         | 49.2          | 2000  | 0.8       | FYG50K822E472EL5 |
| 500 | 3000 | 0.01      | 18         | 19      | 11      | 15      | 20           | 60            | 2000  | 0.8       | FYG50K103E472EL5 |
| 500 | 3000 | 0.0056    | 26         | 15.5    | 6       | 22.5    | 8.4          | 25.2          | 1500  | 0.6       | FYG50K562F142FL5 |
| 500 | 3000 | 0.0068    | 26         | 16.5    | 7       | 22.5    | 10.2         | 30.6          | 1500  | 0.8       | FYG50K682F172FL5 |
| 500 | 3000 | 0.0082    | 26         | 17      | 8.5     | 22.5    | 12.3         | 36.9          | 1500  | 0.8       | FYG50K822F202FL5 |
| 500 | 3000 | 0.01      | 26         | 17      | 8.5     | 22.5    | 15           | 45            | 1500  | 0.8       | FYG50K103F202FL5 |
| 500 | 3000 | 0.012     | 26         | 19      | 10      | 22.5    | 18           | 54            | 1500  | 0.8       | FYG50K123F242FL5 |
| 500 | 3000 | 0.015     | 26         | 19      | 10      | 22.5    | 22.5         | 67.5          | 1500  | 0.8       | FYG50K153F242FL5 |
| 500 | 3000 | 0.018     | 26         | 20      | 11      | 22.5    | 27           | 81            | 1500  | 0.8       | FYG50K183F262FL5 |
| 500 | 3000 | 0.022     | 26         | 22      | 12      | 22.5    | 33           | 99            | 1500  | 0.8       | FYG50K223F272FL5 |
| 500 | 3000 | 0.022     | 32         | 20      | 11      | 27.5    | 17.6         | 52.8          | 800   | 0.8       | FYG50K223G182GL5 |
| 500 | 3000 | 0.033     | 32         | 22      | 13      | 27.5    | 26.4         | 79.2          | 800   | 0.8       | FYG50K333G212GL5 |
| 500 | 3000 | 0.047     | 32         | 28      | 14      | 27.5    | 37.6         | 112.8         | 800   | 0.8       | FYG50K473G262GL5 |
| 500 | 3000 | 0.068     | 32         | 33      | 18      | 27.5    | 54.4         | 163.2         | 800   | 0.8       | FYG50K683G342GL5 |
| 500 | 3000 | 0.1       | 32         | 37      | 22      | 27.5    | 80           | 240           | 800   | 1.0       | FYG50K104G402GL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 50     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 50     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



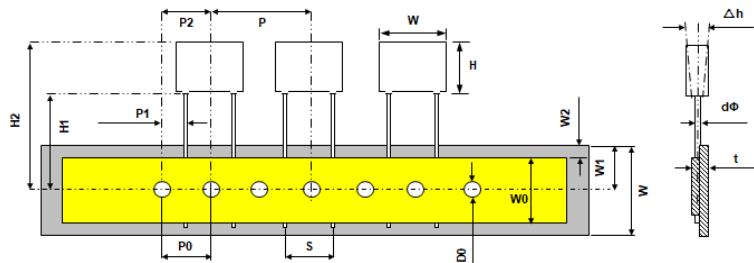
### Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F14       | 26        | 15.5 | 6   | 612                | 612         | 350       |
|       | F17       | 26        | 16.5 | 7   | 528                | 528         | 300       |
|       | F20       | 26        | 17   | 8.5 | 432                | 432         | 250       |
|       | F24       | 26        | 19   | 10  | 372                | 372         | 210       |
|       | F26       | 26        | 20   | 11  | 336                | 336         | 190       |
|       | F27       | 26        | 22   | 12  | 300                | 300         | 170       |
| 27.5  | G15       | 32        | 18   | 9   | 340                | 340         |           |
|       | G18       | 32        | 20   | 11  | 280                | 280         |           |
|       | G21       | 32        | 22   | 13  | 230                | 230         |           |
|       | G26       | 32        | 28   | 14  | 220                | 220         |           |
|       | G27       | 32        | 24.5 | 15  | 200                | 200         |           |
|       | G32       | 32        | 30   | 16  | 190                | 190         |           |
|       | G33       | 32        | 28   | 18  | 170                | 170         |           |
|       | G34       | 32        | 33   | 18  | 170                | 170         |           |
|       | G40       | 32        | 37   | 22  | 140                | 140         |           |

## Lead Taping Information

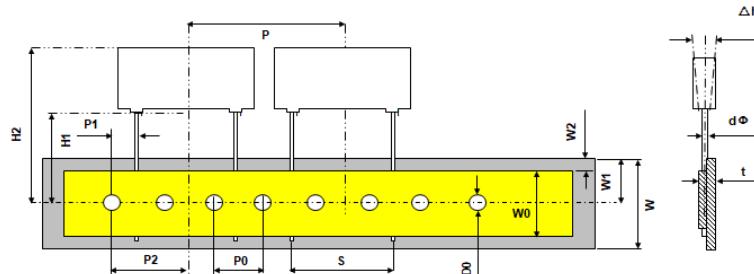
### Taping Style: Straight leads

Lead spacing: 10 - 15mm



Quantity: 10pcs / line

Lead spacing: 22.5 – 27.5mm



Quantity: 6pcs / line

### Taping Specification

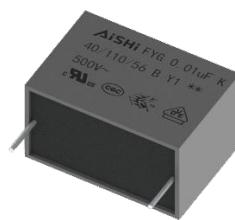
| Description                          | Symbol | Dimension (mm) |      |      |      | Tolerance |
|--------------------------------------|--------|----------------|------|------|------|-----------|
| Lead Spacing                         | S      | 10.0           | 12.5 | 15.0 | 22.5 | +0.8/-0.2 |
| Taping Pitch                         | P      | 25.4           | 25.4 | 25.4 | 38.0 | ±1.0      |
| Feed Hole Pitch                      | P0     | 12.7           | 12.7 | 12.7 | 12.7 | ±0.2      |
| Centering of Lead Wire               | P1     | 7.7            | 6.5  | 5.2  | 7.80 | ±0.7      |
| Centering of Body                    | P2     | 12.7           | 12.7 | 12.7 | 19.1 | ±1.3      |
| Carrier Tape Width                   | W      | 18.0           | 18.0 | 18.0 | 18.0 | ±0.5      |
| Hold Down Tape Width                 | W0     | 9.5            | 9.5  | 9.5  | 9.5  | minimum   |
| Hole Position                        | W1     | 9.0            | 9.0  | 9.0  | 9.0  | ±0.5      |
| Hold Down Tape Position              | W2     | 3.0            | 3.0  | 3.0  | 3.0  | maximum   |
| Feed Hole Diameter                   | D0     | 4.0            | 4.0  | 4.0  | 4.0  | ±0.2      |
| Height of Component From Tape Center | H1     | 20.0           | 20.0 | 20.0 | 20.0 | ±0.5      |
| Top Edge of Component                | H2     | 39.0           | 39.0 | 39.0 | 44.0 | maximum   |
| Lead Wire Diameter                   | d      | 0.6            | 0.8  | 0.8  | 0.8  | ±0.1      |
| Component Alignment                  | △h     | 0.0            | 0.0  | 0.0  | 0.0  | ±2.0      |
| Tape Thickness                       | t      | 0.7            | 0.7  | 0.7  | 0.7  | ±0.2      |

## Overview

The FY1 series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0. This FYJ series robustness design is suitable for high humidity and high temperature environmental conditions and qualify in accordance to AEC-Q200D requirement.

## Features

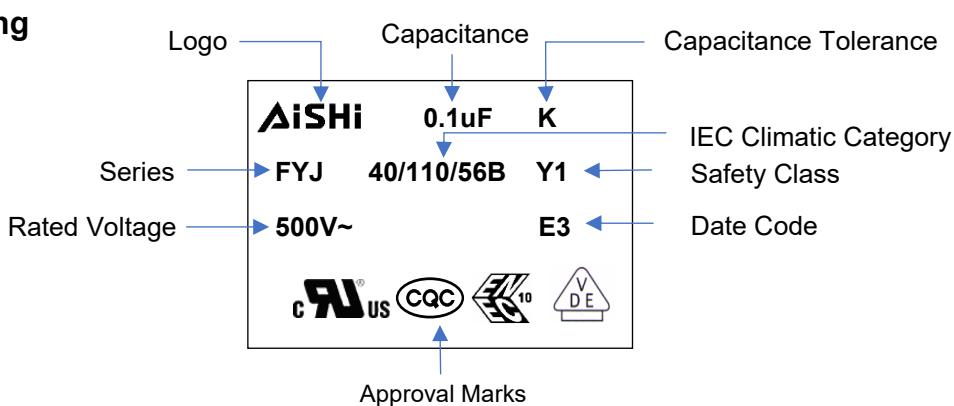
- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Lead space: 15mm~27.5mm
- Capacitance range: 0.00047μF ~ 0.1μF
- Suitable for harsh environment conditions
- THB Grade IIIB (85°C 85%RH 1.0U<sub>RAC</sub> for 1000 hours)
- Automotive Grade (AEC-Q200D)



## Approvals

| Marking | Standard   | File Number |
|---------|--|-------------|
|         | UL 60384-14<br>CAN/CSA-E60384-14                 | Pending     |
|         | IEC 60384-14:2013<br>IEC 60384-14:2013/AMD1:2016 | Pending     |
|         | IEC 60384-14:2013+AMD1:2016<br>CQC11-471112-2015 | Pending     |

## Marking



### Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

### Part Number System

| F              | YJ  | 50            | K                    | 103   | E47                      | 2EL                          | 5                          |
|----------------|---|---------------|----------------------|---|--------------------------|------------------------------|----------------------------|
| Capacitor Type | Series  | Voltage (VAC) | Tolerance            | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code           |
| F = Film       | Class Y1,<br>AEC-Q200,<br>Metallized<br>PP Film | 50=500Vac     | K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Table |

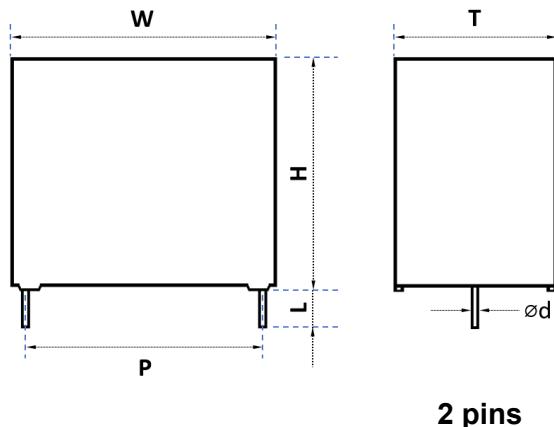
### Terminal Code

| Digit One<br>(Lead/Terminal Type) | Digit Two<br>(Lead Space) |        | Digit Three<br>(Lead Ipsilateral) |        |
|-----------------------------------|---------------------------|--------|-----------------------------------|--------|
| 2 leads for long                  | L                         | 10.0mm | C                                 | 5.1mm  |
| 2 leads for straight cut          | 2                         | 15.0mm | E                                 | 7.5mm  |
| 2 leads for forming cut           | E                         | 22.5mm | F                                 | 10.2mm |
| 4 leads for straight cut          | 4                         | 27.5mm | G                                 | 12.7mm |
| Taping                            | T                         | 37.5mm | K                                 | 20.3mm |
| Taping Straight                   | V                         | N/A    | N                                 | N/A    |

### Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

| Size | Dimension |    |           |      |           |     | Pitch     |      | Lead Wire |     |           |
|------|-----------|----|-----------|------|-----------|-----|-----------|------|-----------|-----|-----------|
|      | Code      | W  | Tolerance | H    | Tolerance | T   | Tolerance | P    | Tolerance | Ød  | Tolerance |
| E14  |           | 18 | 0.5       | 11   | 0.5       | 5   | 0.5       | 15   | 0.5       | 0.6 | 0.05      |
| E17  |           | 18 | 0.5       | 12   | 0.5       | 6   | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E29  |           | 18 | 0.5       | 13.5 | 0.5       | 7.5 | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E34  |           | 18 | 0.5       | 14.5 | 0.5       | 8.5 | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E43  |           | 18 | 0.5       | 16   | 0.5       | 10  | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| E47  |           | 18 | 0.5       | 19   | 0.5       | 11  | 0.5       | 15   | 0.5       | 0.8 | 0.05      |
| F14  |           | 26 | 0.5       | 15.5 | 0.5       | 6   | 0.5       | 22.5 | 0.5       | 0.6 | 0.05      |
| F17  |           | 26 | 0.5       | 16.5 | 0.5       | 7   | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F20  |           | 26 | 0.5       | 17   | 0.5       | 8.5 | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F24  |           | 26 | 0.5       | 19   | 0.5       | 10  | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F26  |           | 26 | 0.5       | 20   | 0.5       | 11  | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| F27  |           | 26 | 0.5       | 22   | 0.5       | 12  | 0.5       | 22.5 | 0.5       | 0.8 | 0.05      |
| G15  |           | 32 | 0.8       | 18   | 0.8       | 9   | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G18  |           | 32 | 0.8       | 20   | 0.8       | 11  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G21  |           | 32 | 0.8       | 22   | 0.8       | 13  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G26  |           | 32 | 0.8       | 28   | 0.8       | 14  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G27  |           | 32 | 0.8       | 24.5 | 0.8       | 15  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G32  |           | 32 | 0.8       | 30   | 0.8       | 16  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G34  |           | 32 | 0.8       | 33   | 0.8       | 18  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |
| G40  |           | 32 | 0.8       | 37   | 0.8       | 22  | 0.8       | 27.5 | 0.5       | 0.8 | 0.05      |

# Metalized Polypropylene Film EMI Suppression Capacitors

## FYJ Series - Class Y1 500VAC (Automotive Grade)

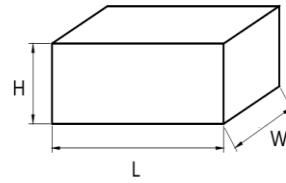


### Rating and Part Number

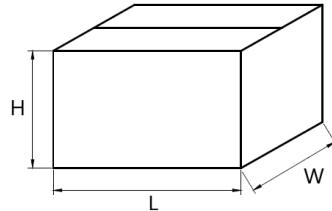
| Vac | Vdc  | Cap Value | Dimensions |         |         |         | Peak Current | Surge Current | dv/dt | Lead Wire | Part Number      |
|-----|------|-----------|------------|---------|---------|---------|--------------|---------------|-------|-----------|------------------|
|     |      |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |               |       |           |                  |
| 500 | 3000 | 0.00047   | 18         | 11      | 5       | 15      | 0.94         | 2.82          | 2000  | 0.6       | FYJ50K471E142EL5 |
| 500 | 3000 | 0.00056   | 18         | 11      | 5       | 15      | 1.12         | 3.36          | 2000  | 0.6       | FYJ50K561E142EL5 |
| 500 | 3000 | 0.00068   | 18         | 11      | 5       | 15      | 1.36         | 4.08          | 2000  | 0.6       | FYJ50K681E142EL5 |
| 500 | 3000 | 0.00082   | 18         | 11      | 5       | 15      | 1.64         | 4.92          | 2000  | 0.6       | FYJ50K821E142EL5 |
| 500 | 3000 | 0.001     | 18         | 11      | 5       | 15      | 2            | 6             | 2000  | 0.6       | FYJ50K102E142EL5 |
| 500 | 3000 | 0.0012    | 18         | 11      | 5       | 15      | 2.4          | 7.2           | 2000  | 0.6       | FYJ50K122E142EL5 |
| 500 | 3000 | 0.0015    | 18         | 11      | 5       | 15      | 75           | 225           | 2000  | 0.6       | FYJ50K152E142EL5 |
| 500 | 3000 | 0.0018    | 18         | 12      | 6       | 15      | 3.6          | 10.8          | 2000  | 0.6       | FYJ50K182E172EL5 |
| 500 | 3000 | 0.0020    | 18         | 12      | 6       | 15      | 4            | 12            | 2000  | 0.6       | FYJ50K202E172EL5 |
| 500 | 3000 | 0.0022    | 18         | 12      | 6       | 15      | 4.4          | 13.2          | 2000  | 0.6       | FYJ50K222E172EL5 |
| 500 | 3000 | 0.0025    | 18         | 12      | 6       | 15      | 5            | 15            | 2000  | 0.6       | FYJ50K252E172EL5 |
| 500 | 3000 | 0.0027    | 18         | 13.5    | 7.5     | 15      | 5.4          | 16.2          | 2000  | 0.8       | FYJ50K272E292EL5 |
| 500 | 3000 | 0.0030    | 18         | 13.5    | 7.5     | 15      | 6            | 18            | 2000  | 0.8       | FYJ50K302E292EL5 |
| 500 | 3000 | 0.0033    | 18         | 13.5    | 7.5     | 15      | 6.6          | 19.8          | 2000  | 0.8       | FYJ50K332E292EL5 |
| 500 | 3000 | 0.0039    | 18         | 13.5    | 7.5     | 15      | 7.8          | 23.4          | 2000  | 0.8       | FYJ50K392E292EL5 |
| 500 | 3000 | 0.0040    | 18         | 13.5    | 7.5     | 15      | 8            | 24            | 2000  | 0.8       | FYJ50K402E292EL5 |
| 500 | 3000 | 0.0047    | 18         | 14.5    | 8.5     | 15      | 9.4          | 28.2          | 2000  | 0.8       | FYJ50K472E342EL5 |
| 500 | 3000 | 0.0050    | 18         | 14.5    | 8.5     | 15      | 10           | 30            | 2000  | 0.8       | FYJ50K502E342EL5 |
| 500 | 3000 | 0.0056    | 18         | 14.5    | 8.5     | 15      | 11.2         | 33.6          | 2000  | 0.8       | FYJ50K562E342EL5 |
| 500 | 3000 | 0.0068    | 18         | 16      | 10      | 15      | 13.6         | 40.8          | 2000  | 0.8       | FYJ50K682E432EL5 |
| 500 | 3000 | 0.0082    | 18         | 19      | 11      | 15      | 16.4         | 49.2          | 2000  | 0.8       | FYJ50K822E472EL5 |
| 500 | 3000 | 0.01      | 18         | 19      | 11      | 15      | 20           | 60            | 2000  | 0.8       | FYJ50K103E472EL5 |
| 500 | 3000 | 0.0056    | 26         | 15.5    | 6       | 22.5    | 8.4          | 25.2          | 1500  | 0.6       | FYJ50K562F142FL5 |
| 500 | 3000 | 0.0068    | 26         | 16.5    | 7       | 22.5    | 10.2         | 30.6          | 1500  | 0.8       | FYJ50K682F172FL5 |
| 500 | 3000 | 0.0082    | 26         | 17      | 8.5     | 22.5    | 12.3         | 36.9          | 1500  | 0.8       | FYJ50K822F202FL5 |
| 500 | 3000 | 0.01      | 26         | 17      | 8.5     | 22.5    | 15           | 45            | 1500  | 0.8       | FYJ50K103F202FL5 |
| 500 | 3000 | 0.012     | 26         | 19      | 10      | 22.5    | 18           | 54            | 1500  | 0.8       | FYJ50K123F242FL5 |
| 500 | 3000 | 0.015     | 26         | 19      | 10      | 22.5    | 22.5         | 67.5          | 1500  | 0.8       | FYJ50K153F242FL5 |
| 500 | 3000 | 0.018     | 26         | 20      | 11      | 22.5    | 27           | 81            | 1500  | 0.8       | FYJ50K183F262FL5 |
| 500 | 3000 | 0.022     | 26         | 22      | 12      | 22.5    | 33           | 99            | 1500  | 0.8       | FYJ50K223F272FL5 |
| 500 | 3000 | 0.022     | 32         | 20      | 11      | 27.5    | 17.6         | 52.8          | 800   | 0.8       | FYJ50K223G182GL5 |
| 500 | 3000 | 0.033     | 32         | 22      | 13      | 27.5    | 26.4         | 79.2          | 800   | 0.8       | FYJ50K333G212GL5 |
| 500 | 3000 | 0.047     | 32         | 28      | 14      | 27.5    | 37.6         | 112.8         | 800   | 0.8       | FYJ50K473G262GL5 |
| 500 | 3000 | 0.068     | 32         | 33      | 18      | 27.5    | 54.4         | 163.2         | 800   | 0.8       | FYJ50K683G342GL5 |
| 500 | 3000 | 0.1       | 32         | 37      | 22      | 27.5    | 80           | 240           | 800   | 1.0       | FYJ50K104G402GL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 50     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 50     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



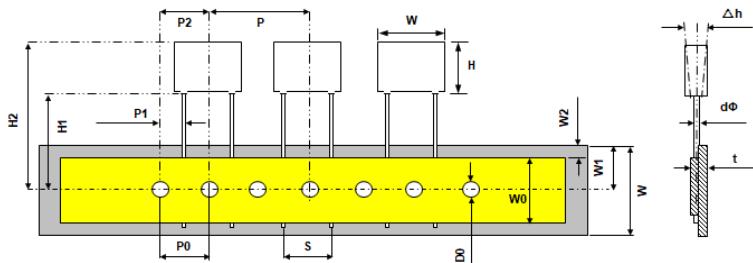
### Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F14       | 26        | 15.5 | 6   | 612                | 612         | 350       |
|       | F17       | 26        | 16.5 | 7   | 528                | 528         | 300       |
|       | F20       | 26        | 17   | 8.5 | 432                | 432         | 250       |
|       | F24       | 26        | 19   | 10  | 372                | 372         | 210       |
|       | F26       | 26        | 20   | 11  | 336                | 336         | 190       |
|       | F27       | 26        | 22   | 12  | 300                | 300         | 170       |
| 27.5  | G15       | 32        | 18   | 9   | 340                | 340         |           |
|       | G18       | 32        | 20   | 11  | 280                | 280         |           |
|       | G21       | 32        | 22   | 13  | 230                | 230         |           |
|       | G26       | 32        | 28   | 14  | 220                | 220         |           |
|       | G27       | 32        | 24.5 | 15  | 200                | 200         |           |
|       | G32       | 32        | 30   | 16  | 190                | 190         |           |
|       | G33       | 32        | 28   | 18  | 170                | 170         |           |
|       | G34       | 32        | 33   | 18  | 170                | 170         |           |
|       | G40       | 32        | 37   | 22  | 140                | 140         |           |

## Lead Taping Information

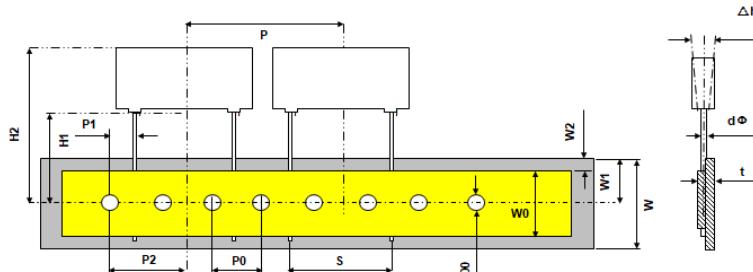
### Taping Style: Straight leads

Lead spacing: 10 - 15mm



Quantity: 10pcs / line

Lead spacing: 22.5 – 27.5mm



Quantity: 6pcs / line

## Taping Specification

| Description                          | Symbol | Dimension (mm) |      |      |      | Tolerance |
|--------------------------------------|--------|----------------|------|------|------|-----------|
| Lead Spacing                         | S      | 10.0           | 12.5 | 15.0 | 22.5 | +0.8/-0.2 |
| Taping Pitch                         | P      | 25.4           | 25.4 | 25.4 | 38.0 | ±1.0      |
| Feed Hole Pitch                      | P0     | 12.7           | 12.7 | 12.7 | 12.7 | ±0.2      |
| Centering of Lead Wire               | P1     | 7.7            | 6.5  | 5.2  | 7.80 | ±0.7      |
| Centering of Body                    | P2     | 12.7           | 12.7 | 12.7 | 19.1 | ±1.3      |
| Carrier Tape Width                   | W      | 18.0           | 18.0 | 18.0 | 18.0 | ±0.5      |
| Hold Down Tape Width                 | W0     | 9.5            | 9.5  | 9.5  | 9.5  | minimum   |
| Hole Position                        | W1     | 9.0            | 9.0  | 9.0  | 9.0  | ±0.5      |
| Hold Down Tape Position              | W2     | 3.0            | 3.0  | 3.0  | 3.0  | maximum   |
| Feed Hole Diameter                   | D0     | 4.0            | 4.0  | 4.0  | 4.0  | ±0.2      |
| Height of Component From Tape Center | H1     | 20.0           | 20.0 | 20.0 | 20.0 | ±0.5      |
| Top Edge of Component                | H2     | 39.0           | 39.0 | 39.0 | 44.0 | maximum   |
| Lead Wire Diameter                   | d      | 0.6            | 0.8  | 0.8  | 0.8  | ±0.1      |
| Component Alignment                  | △h     | 0.0            | 0.0  | 0.0  | 0.0  | ±2.0      |
| Tape Thickness                       | t      | 0.7            | 0.7  | 0.7  | 0.7  | ±0.2      |

## Overview

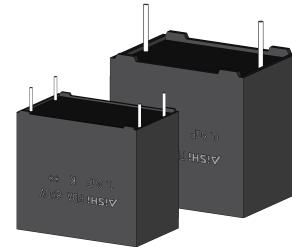
The FDA capacitor is constructed of metallized polypropylene film encapsulated with epoxy resin in a plastic box, with 2 or 4 tinned copper wire. These FDA series is suitable for high performance DC filtering applications.

## Applications

Widely used in high performance DC Link, DC filtering, frequency converters, industrial power supply, solar inverter and energy storage. Not suitable for across the line application.

## Features

- Self-healing
- High capacitance density
- High ripple current and low loss
- High contact reliability
- Suitable for high frequency applications



## Applicable Standard

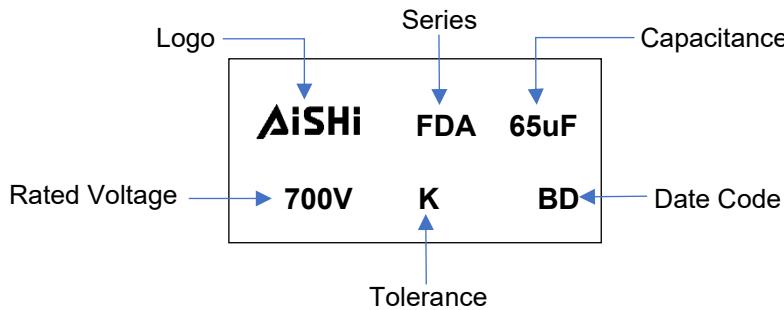
| Approval  | Specification | File Number |
|---|---------------|-------------|
|  | UL 810        | E500537     |



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 450Vdc to 1200Vdc  |
| Capacitance Range           | 1.0μF to 200μF   |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)  |
| Climatic Category           | 40/85/56 IEC 60068-1   |
| Dissipation Factor          | ≤0.002 (0.2%) at 1KHz; C ≤20μF at 25°C<br>≤0.003 (0.3%) at 1KHz; C >20μF at 25°C<br>≤0.004 (0.4%) at 1KHz; C >80μF at 25°C |
| Insulation Resistance       | RC between leads, IR xC≥30,000 s at 100vdc 1minute at +25°C  |

## Marking



## Part Number System

| <b>F</b>       | <b>DA</b>                   | <b>2M</b>   | <b>K</b>                        | <b>656</b>  | <b>M20</b>               | <b>4MD</b>                   | <b>5</b>                        |  |
|----------------|-----------------------------|---|---------------------------------|---|--------------------------|------------------------------|---------------------------------|--|
| Capacitor Type | Series                      | Voltage (VDC)   | Tolerance                       | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |  |
| F = Film       | DC Link, Metallized PP Film | 450=2W<br>500=2H<br>550=2J<br>600=2K<br>700=2M<br>800=2N<br>900=2Q<br>1000=3K<br>1100=3M<br>1200=3B | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |  |

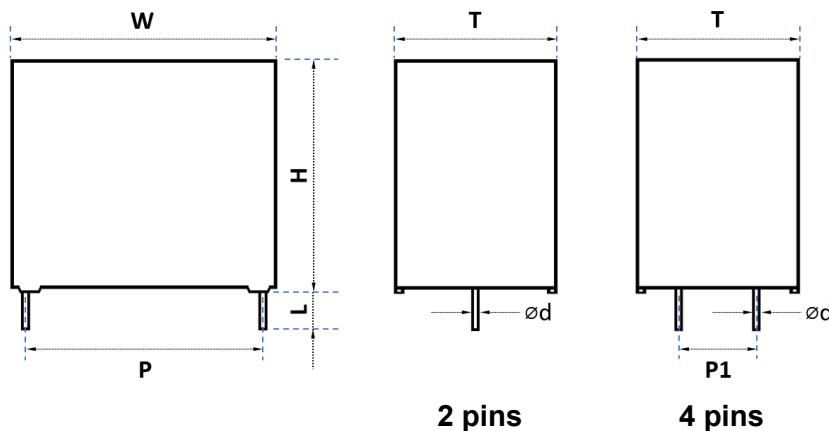
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 27.5mm                    | G | 10.2mm                            | B |
| 2 leads for straight cut          | 2 | 37.5mm                    | K | 12.7mm                            | G |
| 2 leads for forming cut           | E | 52.5mm                    | M | 20.3mm                            | D |
| 4 leads for straight cut          | 4 | N/A                       | N | N/A                               | L |
| 6 leads for straight cut          | 6 |                           |   |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| 20.0mm min  | L |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |    |           | Pitch |           |      |           | $\varnothing d$ |         |           |
|-----------|-----------|-----------|------|-----------|----|-----------|-------|-----------|------|-----------|-----------------|---------|-----------|
|           | W         | Tolerance | H    | Tolerance | T  | Tolerance | P     | Tolerance | P1   | Tolerance | 4 Leads         | 2 Leads | Tolerance |
| G15       | 32        | 0.8       | 18   | 0.8       | 9  | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G22       | 32        | 0.8       | 24.5 | 0.8       | 13 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G27       | 32        | 0.8       | 24.5 | 0.8       | 15 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G32       | 32        | 0.8       | 30   | 0.8       | 16 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22 | 0.8       | 27.5  | 0.5       | 10.2 | 0.5       | 1.0             | 0.8     | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19 | 1.0       | 37.5  | 0.5       | \    | \         | \               | 1.0     | 0.05      |
| K24       | 42        | 1.0       | 40   | 1.0       | 20 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K27       | 42        | 1.0       | 37   | 1.0       | 22 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K32       | 42        | 1.0       | 44   | 1.0       | 24 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K37       | 42        | 1.0       | 37   | 1.0       | 28 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K39       | 42        | 1.0       | 43   | 1.0       | 28 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K42       | 42        | 1.0       | 45   | 1.0       | 30 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.0     | 0.05      |
| K47       | 42        | 1.0       | 50   | 1.0       | 35 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.0     | 0.05      |
| K49       | 42        | 1.0       | 55   | 1.0       | 40 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.0     | 0.05      |
| K52       | 42        | 1.0       | 60   | 1.0       | 45 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.0     | 0.05      |
| K66       | 42        | 1.0       | 30   | 1.0       | 17 | 1.0       | 37.5  | 0.5       | \    | \         | \               | 1.0     | 0.05      |
| M10       | 57.5      | 1.0       | 45   | 1.0       | 25 | 1.0       | 52.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.2     | 0.05      |
| M16       | 57.5      | 1.0       | 45   | 1.0       | 30 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M20       | 57.5      | 1.0       | 50   | 1.0       | 35 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M23       | 57.5      | 1.0       | 65   | 1.0       | 35 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M32       | 57.5      | 1.0       | 55   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M34       | 57.5      | 1.0       | 65   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |

# Metalized Polypropylene Film DC-Link Capacitors

## FDA Series - 450 ~ 1200VDC

### Rating and Part Number

| Vdc | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz<br>A 70°C | Peak Current<br>A | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-------------------------|------------|---------|---------|---------|----------|-------------------------|-------------------|--------------------|---------------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|     |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |                         |                   |                    |                                       |           |                     |               |                 |                  |
| 450 | 5                       | 32         | 20      | 11      | 27.5    | \        | 5.0                     | 325               | 975                | 20.0                                  | 25        | 30.0                | 65            | 0.8             | FDA2WK505G182GL5 |
| 450 | 10                      | 32         | 24.5    | 15      | 27.5    | \        | 7.0                     | 650               | 1950               | 11.0                                  | 25        | 27.8                | 65            | 0.8             | FDA2WK106G272GL5 |
| 450 | 15                      | 32         | 33      | 18      | 27.5    | \        | 11.0                    | 975               | 2925               | 7.0                                   | 25        | 17.7                | 65            | 0.8             | FDA2WK156G342GL5 |
| 450 | 22                      | 32         | 37      | 22      | 27.5    | \        | 11.0                    | 1430              | 4290               | 5.0                                   | 28        | 24.8                | 65            | 0.8             | FDA2WK226G402GL5 |
| 450 | 25                      | 32         | 37      | 22      | 27.5    | \        | 12.0                    | 1625              | 4875               | 4.8                                   | 28        | 24.8                | 65            | 0.8             | FDA2WK256G402GL5 |
| 450 | 30                      | 42         | 40      | 20      | 37.5    | 10.2     | 12.5                    | 1050              | 3150               | 7.5                                   | 30        | 12.8                | 35            | 1.2             | FDA2WK306K244KB5 |
| 450 | 35                      | 42         | 37      | 22      | 37.5    | 10.2     | 13.5                    | 1225              | 3675               | 7.0                                   | 30        | 11.8                | 35            | 1.2             | FDA2WK356K274KB5 |
| 450 | 40                      | 42         | 37      | 28      | 37.5    | 10.2     | 14.5                    | 1400              | 4200               | 6.2                                   | 30        | 11.5                | 35            | 1.2             | FDA2WK406K374KB5 |
| 450 | 50                      | 42         | 43      | 28      | 37.5    | 10.2     | 16.0                    | 1750              | 5250               | 5.0                                   | 30        | 11.7                | 35            | 1.2             | FDA2WK506K394KB5 |
| 450 | 50                      | 42         | 45      | 30      | 37.5    | 20.3     | 16.0                    | 1750              | 5250               | 5.0                                   | 30        | 11.7                | 35            | 1.2             | FDA2WK506K424KD5 |
| 450 | 60                      | 42         | 45      | 30      | 37.5    | 20.3     | 16.5                    | 2100              | 6300               | 4.5                                   | 30        | 12.2                | 35            | 1.2             | FDA2WK606K424KD5 |
| 450 | 80                      | 42         | 50      | 35      | 37.5    | 20.3     | 20.5                    | 2800              | 8400               | 3.8                                   | 30        | 12.2                | 35            | 1.2             | FDA2WK806K474KD5 |
| 450 | 110                     | 42         | 60      | 45      | 37.5    | 20.3     | 24.5                    | 3850              | 11550              | 3.6                                   | 30        | 12.2                | 35            | 1.2             | FDA2WK117K524KD5 |
| 450 | 130                     | 42         | 60      | 45      | 37.5    | 20.3     | 28.5                    | 4550              | 13650              | 3.0                                   | 30        | 12.2                | 35            | 1.2             | FDA2WK137K524KD5 |
| 450 | 75                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.5                    | 1500              | 4500               | 5.5                                   | 35        | 10.0                | 20            | 1.2             | FDA2WK756M164MD5 |
| 450 | 80                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 17.0                    | 1600              | 4800               | 5.0                                   | 35        | 10.4                | 20            | 1.2             | FDA2WK806M164MD5 |
| 450 | 100                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.0                    | 2000              | 6000               | 4.5                                   | 35        | 10.3                | 20            | 1.2             | FDA2WK107M204MD5 |
| 450 | 110                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 19.0                    | 2200              | 6600               | 4.0                                   | 35        | 10.4                | 20            | 1.2             | FDA2WK117M204MD5 |
| 450 | 120                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 21.5                    | 2400              | 7200               | 3.8                                   | 35        | 10.4                | 20            | 1.2             | FDA2WK127M204MD5 |
| 450 | 150                     | 57.5       | 65      | 35      | 52.5    | 20.3     | 24.5                    | 3000              | 9000               | 3.6                                   | 35        | 10.4                | 20            | 1.2             | FDA2WK157M234MD5 |
| 450 | 160                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 28.5                    | 3200              | 9600               | 3.0                                   | 35        | 10.4                | 20            | 1.2             | FDA2WK167M324MD5 |
| 450 | 200                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0                    | 4000              | 12000              | 2.6                                   | 35        | 10.4                | 20            | 1.2             | FDA2WK207M344MD5 |
| 550 | 5                       | 32         | 22      | 13      | 27.5    | \        | 5.5                     | 325               | 975                | 19.5                                  | 25        | 25.4                | 65            | 0.8             | FDA2JK505G212GL5 |
| 550 | 10                      | 32         | 33      | 18      | 27.5    | \        | 7.5                     | 650               | 1950               | 10.5                                  | 25        | 25.4                | 65            | 0.8             | FDA2JK106G342GL5 |
| 550 | 15                      | 32         | 37      | 22      | 27.5    | \        | 11.5                    | 975               | 2925               | 6.8                                   | 28        | 16.7                | 65            | 0.8             | FDA2JK156G402GL5 |
| 550 | 22                      | 32         | 37      | 22      | 27.5    | \        | 11.5                    | 1430              | 4290               | 4.9                                   | 28        | 23.1                | 65            | 0.8             | FDA2JK226G402GL5 |
| 550 | 30                      | 42         | 44      | 24      | 37.5    | 10.2     | 13.0                    | 1050              | 3150               | 7.2                                   | 30        | 12.3                | 35            | 1.2             | FDA2JK306K324KB5 |
| 550 | 35                      | 42         | 45      | 30      | 37.5    | 20.3     | 13.8                    | 1225              | 3675               | 6.8                                   | 30        | 11.6                | 35            | 1.2             | FDA2JK356K424KD5 |
| 550 | 40                      | 42         | 45      | 30      | 37.5    | 20.3     | 14.8                    | 1400              | 4200               | 6.0                                   | 30        | 11.4                | 35            | 1.2             | FDA2JK406K424KD5 |
| 550 | 50                      | 42         | 50      | 35      | 37.5    | 20.3     | 17.0                    | 1750              | 5250               | 4.8                                   | 30        | 10.8                | 35            | 1.2             | FDA2JK506K474KD5 |
| 550 | 60                      | 42         | 50      | 35      | 37.5    | 20.3     | 18.0                    | 2100              | 6300               | 4.2                                   | 30        | 11.0                | 35            | 1.2             | FDA2JK606K474KD5 |
| 550 | 70                      | 42         | 50      | 35      | 37.5    | 20.3     | 20.5                    | 2450              | 7350               | 3.8                                   | 30        | 11.0                | 35            | 1.2             | FDA2JK706K474KD5 |
| 550 | 110                     | 42         | 60      | 45      | 37.5    | 20.3     | 24.5                    | 3850              | 11550              | 3.6                                   | 30        | 11.0                | 35            | 1.2             | FDA2JK117K524KD5 |
| 550 | 75                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.8                    | 1500              | 4500               | 5.2                                   | 35        | 10.2                | 20            | 1.2             | FDA2JK756M164MD5 |
| 550 | 100                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.5                    | 2000              | 6000               | 4.3                                   | 35        | 10.2                | 20            | 1.2             | FDA2JK107M204MD5 |
| 550 | 110                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0                    | 2200              | 6600               | 4.0                                   | 35        | 9.4                 | 20            | 1.2             | FDA2JK117M204MD5 |
| 550 | 140                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0                    | 2800              | 8400               | 3.5                                   | 35        | 6.3                 | 20            | 1.2             | FDA2JK147M324MD5 |
| 550 | 140                     | 57.5       | 65      | 35      | 52.5    | 20.3     | 26.0                    | 2800              | 8400               | 3.5                                   | 35        | 6.3                 | 20            | 1.2             | FDA2JK147M234MD5 |
| 550 | 170                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 32.0                    | 3400              | 10200              | 2.8                                   | 35        | 5.2                 | 20            | 1.2             | FDA2JK177M344MD5 |
| 550 | 180                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0                    | 3600              | 10800              | 2.6                                   | 35        | 5.2                 | 20            | 1.2             | FDA2JK187M344MD5 |
| 600 | 2                       | 32         | 18      | 9       | 27.5    | \        | 2.9                     | 130               | 390                | 40.0                                  | 25        | 44.6                | 65            | 0.8             | FDA2KK205G152GL5 |
| 600 | 3                       | 32         | 20      | 11      | 27.5    | \        | 4.0                     | 195               | 585                | 28.0                                  | 25        | 33.5                | 65            | 0.8             | FDA2KK305G182GL5 |
| 600 | 4                       | 32         | 20      | 11      | 27.5    | \        | 5.5                     | 260               | 780                | 23.0                                  | 25        | 21.6                | 65            | 0.8             | FDA2KK405G182GL5 |
| 600 | 5                       | 32         | 22      | 13      | 27.5    | \        | 7.0                     | 325               | 975                | 14.5                                  | 25        | 21.1                | 65            | 0.8             | FDA2KK505G212GL5 |
| 600 | 6                       | 32         | 24.5    | 15      | 27.5    | \        | 7.3                     | 390               | 1170               | 13.0                                  | 25        | 21.7                | 65            | 0.8             | FDA2KK605G272GL5 |
| 600 | 7                       | 32         | 24.5    | 15      | 27.5    | \        | 8.5                     | 455               | 1365               | 12.0                                  | 25        | 17.3                | 65            | 0.8             | FDA2KK705G272GL5 |
| 600 | 8                       | 32         | 28      | 14      | 27.5    | \        | 9.5                     | 520               | 1560               | 11.0                                  | 25        | 15.1                | 65            | 0.8             | FDA2KK805G262GL5 |
| 600 | 9                       | 32         | 30      | 16      | 27.5    | \        | 10.5                    | 585               | 1755               | 10.5                                  | 25        | 13.0                | 65            | 0.8             | FDA2KK905G322GL5 |
| 600 | 10                      | 32         | 30      | 16      | 27.5    | \        | 11.0                    | 650               | 1950               | 10.0                                  | 25        | 12.4                | 65            | 0.8             | FDA2KK106G322GL5 |
| 600 | 12                      | 32         | 33      | 18      | 27.5    | \        | 12.0                    | 780               | 2340               | 9.5                                   | 25        | 11.0                | 65            | 0.8             | FDA2KK126G342GL5 |
| 600 | 15                      | 32         | 37      | 22      | 27.5    | \        | 12.0                    | 975               | 2925               | 9.5                                   | 28        | 11.0                | 65            | 0.8             | FDA2KK156G402GL5 |
| 600 | 15                      | 32         | 37      | 22      | 27.5    | 10.2     | 14.5                    | 975               | 2925               | 7.0                                   | 28        | 10.2                | 65            | 1.0             | FDA2KK156G404GB5 |
| 600 | 18                      | 32         | 37      | 22      | 27.5    | \        | 12.5                    | 1170              | 3510               | 9.0                                   | 28        | 10.7                | 65            | 0.8             | FDA2KK186G402GL5 |
| 600 | 18                      | 32         | 37      | 22      | 27.5    | 10.2     | 16.5                    | 1170              | 3510               | 6.0                                   | 28        | 9.2                 | 65            | 1.0             | FDA2KK186G404GB5 |
| 600 | 10                      | 42         | 30      | 17      | 37.5    | \        | 7.0                     | 350               | 1050               | 18.0                                  | 28        | 17.0                | 35            | 1.0             | FDA2KK106K662KL5 |
| 600 | 12                      | 42         | 30      | 17      | 37.5    | \        | 8.0                     | 420               | 1260               | 12.0                                  | 28        | 19.5                | 35            | 1.0             | FDA2KK126K662KL5 |

# Metalized Polypropylene Film DC-Link Capacitors

## FDA Series - 450 ~ 1200VDC



### Rating and Part Number

| Vdc | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz<br>A 70°C | Peak Current<br>A | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-------------------------|------------|---------|---------|---------|----------|-------------------------|-------------------|--------------------|---------------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|     |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |                         |                   |                    |                                       |           |                     |               |                 |                  |
| 600 | 15                      | 42         | 32      | 19      | 37.5    | \        | 9.5                     | 525               | 1575               | 11.0                                  | 28        | 15.1                | 35            | 1.0             | FDA2KK156K212KL5 |
| 600 | 20                      | 42         | 40      | 20      | 37.5    | 10.2     | 12.5                    | 700               | 2100               | 9.0                                   | 30        | 10.7                | 35            | 1.2             | FDA2KK206K244KB5 |
| 600 | 22                      | 42         | 40      | 20      | 37.5    | 10.2     | 13.5                    | 770               | 2310               | 8.0                                   | 30        | 10.3                | 35            | 1.2             | FDA2KK226K244KB5 |
| 600 | 25                      | 42         | 40      | 20      | 37.5    | 10.2     | 15.5                    | 875               | 2625               | 7.0                                   | 30        | 8.9                 | 35            | 1.2             | FDA2KK256K244KB5 |
| 600 | 30                      | 42         | 44      | 24      | 37.5    | 10.2     | 16.5                    | 1050              | 3150               | 6.5                                   | 30        | 8.5                 | 35            | 1.2             | FDA2KK306K324KB5 |
| 600 | 35                      | 42         | 45      | 30      | 37.5    | 20.3     | 18.5                    | 1225              | 3675               | 6.0                                   | 30        | 7.3                 | 35            | 1.2             | FDA2KK356K424KD5 |
| 600 | 40                      | 42         | 45      | 30      | 37.5    | 20.3     | 20.5                    | 1400              | 4200               | 5.0                                   | 30        | 7.1                 | 35            | 1.2             | FDA2KK406K424KD5 |
| 600 | 45                      | 42         | 50      | 35      | 37.5    | 20.3     | 23.0                    | 1575              | 4725               | 4.5                                   | 30        | 6.3                 | 35            | 1.2             | FDA2KK456K474KD5 |
| 600 | 50                      | 42         | 50      | 35      | 37.5    | 20.3     | 25.0                    | 1750              | 5250               | 4.0                                   | 30        | 6.0                 | 35            | 1.2             | FDA2KK506K474KD5 |
| 600 | 60                      | 42         | 55      | 40      | 37.5    | 20.3     | 27.0                    | 2100              | 6300               | 3.8                                   | 30        | 5.4                 | 35            | 1.2             | FDA2KK606K494KD5 |
| 600 | 70                      | 42         | 55      | 40      | 37.5    | 20.3     | 29.0                    | 2450              | 7350               | 3.5                                   | 30        | 5.1                 | 35            | 1.2             | FDA2KK706K494KD5 |
| 600 | 75                      | 42         | 60      | 45      | 37.5    | 20.3     | 30.0                    | 2625              | 7875               | 3.0                                   | 30        | 5.6                 | 35            | 1.2             | FDA2KK756K524KD5 |
| 600 | 80                      | 42         | 60      | 45      | 37.5    | 20.3     | 32.0                    | 2800              | 8400               | 2.8                                   | 30        | 5.2                 | 35            | 1.2             | FDA2KK806K524KD5 |
| 600 | 85                      | 42         | 60      | 45      | 37.5    | 20.3     | 34.0                    | 2975              | 8925               | 2.5                                   | 30        | 5.2                 | 35            | 1.2             | FDA2KK856K524KD5 |
| 600 | 40                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 13.5                    | 800               | 2400               | 8.0                                   | 35        | 10.3                | 20            | 1.2             | FDA2KK406M104MB5 |
| 600 | 45                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 14.0                    | 900               | 2700               | 7.5                                   | 35        | 10.2                | 20            | 1.2             | FDA2KK456M104MB5 |
| 600 | 50                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 15.5                    | 1000              | 3000               | 7.0                                   | 35        | 8.9                 | 20            | 1.2             | FDA2KK506M104MB5 |
| 600 | 55                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 17.0                    | 1100              | 3300               | 6.2                                   | 35        | 8.4                 | 20            | 1.2             | FDA2KK556M164MD5 |
| 600 | 60                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.5                    | 1200              | 3600               | 6.0                                   | 35        | 7.3                 | 20            | 1.2             | FDA2KK606M164MD5 |
| 600 | 65                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0                    | 1300              | 3900               | 5.5                                   | 35        | 6.8                 | 20            | 1.2             | FDA2KK656M204MD5 |
| 600 | 70                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 21.5                    | 1400              | 4200               | 5.0                                   | 35        | 6.5                 | 20            | 1.2             | FDA2KK706M204MD5 |
| 600 | 75                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 23.5                    | 1500              | 4500               | 4.5                                   | 35        | 6.0                 | 20            | 1.2             | FDA2KK756M204MD5 |
| 600 | 80                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.5                    | 1600              | 4800               | 4.2                                   | 35        | 5.9                 | 20            | 1.2             | FDA2KK806M204MD5 |
| 600 | 90                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0                    | 1800              | 5400               | 4.0                                   | 35        | 5.5                 | 20            | 1.2             | FDA2KK906M324MD5 |
| 600 | 100                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 29.0                    | 2000              | 6000               | 3.4                                   | 35        | 5.2                 | 20            | 1.2             | FDA2KK107M324MD5 |
| 600 | 110                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 30.0                    | 2200              | 6600               | 3.0                                   | 35        | 5.6                 | 20            | 1.2             | FDA2KK117M324MD5 |
| 600 | 120                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 32.0                    | 2400              | 7200               | 2.8                                   | 35        | 5.2                 | 20            | 1.2             | FDA2KK127M344MD5 |
| 600 | 130                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0                    | 2600              | 7800               | 2.6                                   | 35        | 5.3                 | 20            | 1.2             | FDA2KK137M344MD5 |
| 600 | 140                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 34.0                    | 2800              | 8400               | 2.5                                   | 35        | 5.2                 | 20            | 1.2             | FDA2KK147M344MD5 |
| 700 | 2                       | 32         | 18      | 9       | 27.5    | \        | 2.9                     | 130               | 390                | 40.0                                  | 25        | 44.6                | 65            | 0.8             | FDA2MK305G152GL5 |
| 700 | 3                       | 32         | 20      | 11      | 27.5    | \        | 4.0                     | 195               | 585                | 28.0                                  | 25        | 33.5                | 65            | 0.8             | FDA2MK305G182GL5 |
| 700 | 4                       | 32         | 20      | 11      | 27.5    | \        | 5.5                     | 260               | 780                | 23.0                                  | 25        | 21.6                | 65            | 0.8             | FDA2MK405G182GL5 |
| 700 | 5                       | 32         | 22      | 13      | 27.5    | \        | 7.0                     | 325               | 975                | 14.5                                  | 25        | 21.1                | 65            | 0.8             | FDA2MK505G212GL5 |
| 700 | 6                       | 32         | 24.5    | 15      | 27.5    | \        | 7.3                     | 390               | 1170               | 13.0                                  | 25        | 21.7                | 65            | 0.8             | FDA2MK605G272GL5 |
| 700 | 7                       | 32         | 24.5    | 15      | 27.5    | \        | 8.5                     | 455               | 1365               | 12.0                                  | 25        | 17.3                | 65            | 0.8             | FDA2MK705G272GL5 |
| 700 | 8                       | 32         | 28      | 14      | 27.5    | \        | 9.5                     | 520               | 1560               | 11.0                                  | 25        | 15.1                | 65            | 0.8             | FDA2MK805G262GL5 |
| 700 | 9                       | 32         | 30      | 16      | 27.5    | \        | 10.5                    | 585               | 1755               | 10.5                                  | 25        | 13.0                | 65            | 0.8             | FDA2MK905G322GL5 |
| 700 | 10                      | 32         | 30      | 16      | 27.5    | \        | 11.0                    | 650               | 1950               | 10.0                                  | 25        | 12.4                | 65            | 0.8             | FDA2MK106G322GL5 |
| 700 | 12                      | 32         | 33      | 18      | 27.5    | \        | 12.0                    | 780               | 2340               | 9.5                                   | 25        | 11.0                | 65            | 0.8             | FDA2MK126G342GL5 |
| 700 | 15                      | 32         | 37      | 22      | 27.5    | \        | 12.0                    | 975               | 2925               | 9.5                                   | 28        | 11.0                | 65            | 0.8             | FDA2MK156G402GL5 |
| 700 | 15                      | 32         | 37      | 22      | 27.5    | 10.2     | 14.5                    | 975               | 2925               | 7.0                                   | 28        | 10.2                | 65            | 1.0             | FDA2MK156G404GB5 |
| 700 | 18                      | 32         | 37      | 22      | 27.5    | \        | 12.5                    | 1170              | 3510               | 9.0                                   | 28        | 10.7                | 65            | 0.8             | FDA2MK186G402GL5 |
| 700 | 18                      | 32         | 37      | 22      | 27.5    | 10.2     | 16.5                    | 1170              | 3510               | 6.0                                   | 28        | 9.2                 | 65            | 1.0             | FDA2MK186G404GB5 |
| 700 | 10                      | 42         | 30      | 17      | 37.5    | \        | 7.0                     | 350               | 1050               | 18.0                                  | 28        | 17.0                | 35            | 1.0             | FDA2MK106K662KL5 |
| 700 | 12                      | 42         | 30      | 17      | 37.5    | \        | 8.0                     | 420               | 1260               | 12.0                                  | 28        | 19.5                | 35            | 1.0             | FDA2MK126K662KL5 |
| 700 | 15                      | 42         | 32      | 19      | 37.5    | \        | 9.5                     | 525               | 1575               | 11.0                                  | 28        | 15.1                | 35            | 1.0             | FDA2MK156K212KL5 |
| 700 | 20                      | 42         | 40      | 20      | 37.5    | 10.2     | 12.5                    | 700               | 2100               | 9.0                                   | 30        | 10.7                | 35            | 1.2             | FDA2MK206K244KB5 |
| 700 | 22                      | 42         | 40      | 20      | 37.5    | 10.2     | 13.5                    | 770               | 2310               | 8.0                                   | 30        | 10.3                | 35            | 1.2             | FDA2MK226K244KB5 |
| 700 | 25                      | 42         | 40      | 20      | 37.5    | 10.2     | 15.5                    | 875               | 2625               | 7.0                                   | 30        | 8.9                 | 35            | 1.2             | FDA2MK256K244KB5 |
| 700 | 30                      | 42         | 44      | 24      | 37.5    | 10.2     | 16.5                    | 1050              | 3150               | 6.5                                   | 30        | 8.5                 | 35            | 1.2             | FDA2MK306K324KB5 |
| 700 | 35                      | 42         | 45      | 30      | 37.5    | 20.3     | 18.5                    | 1225              | 3675               | 6.0                                   | 30        | 7.3                 | 35            | 1.2             | FDA2MK356K424KD5 |
| 700 | 40                      | 42         | 45      | 30      | 37.5    | 20.3     | 20.5                    | 1400              | 4200               | 5.0                                   | 30        | 7.1                 | 35            | 1.2             | FDA2MK406K424KD5 |
| 700 | 45                      | 42         | 50      | 35      | 37.5    | 20.3     | 23.0                    | 1575              | 4725               | 4.5                                   | 30        | 6.3                 | 35            | 1.2             | FDA2MK456K474KD5 |
| 700 | 50                      | 42         | 50      | 35      | 37.5    | 20.3     | 25.0                    | 1750              | 5250               | 4.0                                   | 30        | 6.0                 | 35            | 1.2             | FDA2MK506K474KD5 |
| 700 | 60                      | 42         | 55      | 40      | 37.5    | 20.3     | 27.0                    | 2100              | 6300               | 3.8                                   | 30        | 5.4                 | 35            | 1.2             | FDA2MK606K494KD5 |
| 700 | 70                      | 42         | 55      | 40      | 37.5    | 20.3     | 29.0                    | 2450              | 7350               | 3.5                                   | 30        | 5.1                 | 35            | 1.2             | FDA2MK706K494KD5 |

# Metalized Polypropylene Film DC-Link Capacitors

## FDA Series - 450 ~ 1200VDC

### Rating and Part Number

| Vdc | Cap Value $\mu\text{F}$ | Dimensions |      |      |      |       | Irms 10KHz A 70°C | Peak Current A | Surge Current A | ESR <sub>Typical</sub> 10KHz mΩ | ESL nH | Thermal Res °C/W | dv/dt V/us | Lead Wire mm | Part Number      |
|-----|-------------------------|------------|------|------|------|-------|-------------------|----------------|-----------------|---------------------------------|--------|------------------|------------|--------------|------------------|
|     |                         | W mm       | H mm | T mm | P mm | P1 mm |                   |                |                 |                                 |        |                  |            |              |                  |
| 700 | 75                      | 42         | 60   | 45   | 37.5 | 20.3  | 30.0              | 2625           | 7875            | 3.0                             | 30     | 5.6              | 35         | 1.2          | FDA2MK756K524KD5 |
| 700 | 80                      | 42         | 60   | 45   | 37.5 | 20.3  | 32.0              | 2800           | 8400            | 2.8                             | 30     | 5.2              | 35         | 1.2          | FDA2MK806K524KD5 |
| 700 | 85                      | 42         | 60   | 45   | 37.5 | 20.3  | 34.0              | 2975           | 8925            | 2.5                             | 30     | 5.2              | 35         | 1.2          | FDA2MK856K524KD5 |
| 700 | 40                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 13.5              | 800            | 2400            | 8.0                             | 35     | 10.3             | 20         | 1.2          | FDA2MK406M104MB5 |
| 700 | 45                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 14.0              | 900            | 2700            | 7.5                             | 35     | 10.2             | 20         | 1.2          | FDA2MK456M104MB5 |
| 700 | 50                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 15.5              | 1000           | 3000            | 7.0                             | 35     | 8.9              | 20         | 1.2          | FDA2MK506M104MB5 |
| 700 | 55                      | 57.5       | 45   | 30   | 52.5 | 20.3  | 17.0              | 1100           | 3300            | 6.2                             | 35     | 8.4              | 20         | 1.2          | FDA2MK556M164MD5 |
| 700 | 60                      | 57.5       | 45   | 30   | 52.5 | 20.3  | 18.5              | 1200           | 3600            | 6.0                             | 35     | 7.3              | 20         | 1.2          | FDA2MK606M164MD5 |
| 700 | 65                      | 57.5       | 50   | 35   | 52.5 | 20.3  | 20.0              | 1300           | 3900            | 5.5                             | 35     | 6.8              | 20         | 1.2          | FDA2MK656M204MD5 |
| 700 | 70                      | 57.5       | 50   | 35   | 52.5 | 20.3  | 21.5              | 1400           | 4200            | 5.0                             | 35     | 6.5              | 20         | 1.2          | FDA2MK706M204MD5 |
| 700 | 75                      | 57.5       | 50   | 35   | 52.5 | 20.3  | 23.5              | 1500           | 4500            | 4.5                             | 35     | 6.0              | 20         | 1.2          | FDA2MK756M204MD5 |
| 700 | 80                      | 57.5       | 50   | 35   | 52.5 | 20.3  | 24.5              | 1600           | 4800            | 4.2                             | 35     | 5.9              | 20         | 1.2          | FDA2MK806M204MD5 |
| 700 | 90                      | 57.5       | 55   | 45   | 52.5 | 20.3  | 26.0              | 1800           | 5400            | 4.0                             | 35     | 5.5              | 20         | 1.2          | FDA2MK906M324MD5 |
| 700 | 100                     | 57.5       | 55   | 45   | 52.5 | 20.3  | 29.0              | 2000           | 6000            | 3.4                             | 35     | 5.2              | 20         | 1.2          | FDA2MK107M324MD5 |
| 700 | 110                     | 57.5       | 55   | 45   | 52.5 | 20.3  | 30.0              | 2200           | 6600            | 3.0                             | 35     | 5.6              | 20         | 1.2          | FDA2MK117M324MD5 |
| 700 | 120                     | 57.5       | 65   | 45   | 52.5 | 20.3  | 32.0              | 2400           | 7200            | 2.8                             | 35     | 5.2              | 20         | 1.2          | FDA2MK127M344MD5 |
| 700 | 130                     | 57.5       | 65   | 45   | 52.5 | 20.3  | 33.0              | 2600           | 7800            | 2.6                             | 35     | 5.3              | 20         | 1.2          | FDA2MK137M344MD5 |
| 700 | 140                     | 57.5       | 65   | 45   | 52.5 | 20.3  | 34.0              | 2800           | 8400            | 2.5                             | 35     | 5.2              | 20         | 1.2          | FDA2MK147M344MD5 |
| 800 | 2                       | 32         | 18   | 9    | 27.5 | \     | 2.9               | 130            | 390             | 40.0                            | 25     | 44.6             | 65         | 0.8          | FDA2NK205G152GL5 |
| 800 | 3                       | 32         | 20   | 11   | 27.5 | \     | 4.5               | 195            | 585             | 26.0                            | 25     | 28.5             | 65         | 0.8          | FDA2NK305G182GL5 |
| 800 | 4                       | 32         | 24.5 | 13   | 27.5 | \     | 5.8               | 260            | 780             | 22.0                            | 25     | 20.3             | 65         | 0.8          | FDA2NK405G222GL5 |
| 800 | 5                       | 32         | 24.5 | 15   | 27.5 | \     | 7.5               | 325            | 975             | 14.0                            | 25     | 19.0             | 65         | 0.8          | FDA2NK505G272GL5 |
| 800 | 6                       | 32         | 30   | 16   | 27.5 | \     | 8.5               | 390            | 1170            | 12.0                            | 25     | 17.3             | 65         | 0.8          | FDA2NK605G322GL5 |
| 800 | 7                       | 32         | 30   | 16   | 27.5 | \     | 9.5               | 455            | 1365            | 11.0                            | 25     | 15.1             | 65         | 0.8          | FDA2NK705G322GL5 |
| 800 | 8                       | 32         | 33   | 18   | 27.5 | \     | 10.5              | 520            | 1560            | 10.5                            | 25     | 13.0             | 65         | 0.8          | FDA2NK805G342GL5 |
| 800 | 9                       | 32         | 33   | 18   | 27.5 | \     | 11.5              | 585            | 1755            | 10.2                            | 25     | 11.1             | 65         | 0.8          | FDA2NK905G342GL5 |
| 800 | 10                      | 32         | 37   | 22   | 27.5 | \     | 12.0              | 650            | 1950            | 9.5                             | 25     | 11.0             | 65         | 0.8          | FDA2NK106G402GL5 |
| 800 | 10                      | 32         | 37   | 22   | 27.5 | 10.2  | 14.0              | 650            | 1950            | 8.5                             | 25     | 9.0              | 65         | 1.0          | FDA2NK106G404GB5 |
| 800 | 12                      | 32         | 37   | 22   | 27.5 | \     | 12.0              | 780            | 2340            | 9.5                             | 25     | 11.0             | 65         | 0.8          | FDA2NK126G402GL5 |
| 800 | 12                      | 32         | 37   | 22   | 27.5 | 10.2  | 15.0              | 780            | 2340            | 8.0                             | 25     | 8.3              | 65         | 1.0          | FDA2NK126G404GB5 |
| 800 | 14                      | 32         | 37   | 22   | 27.5 | \     | 12.0              | 910            | 2730            | 9.5                             | 25     | 11.0             | 65         | 0.8          | FDA2NK146G402GL5 |
| 800 | 14                      | 32         | 37   | 22   | 27.5 | 10.2  | 16.0              | 910            | 2730            | 7.5                             | 25     | 7.8              | 65         | 1.0          | FDA2NK146G404GB5 |
| 800 | 8                       | 42         | 30   | 17   | 37.5 | \     | 5.5               | 280            | 840             | 22.5                            | 28     | 22.0             | 35         | 1.0          | FDA2NK805K662KL5 |
| 800 | 9                       | 42         | 30   | 17   | 37.5 | \     | 6.0               | 315            | 945             | 21.5                            | 28     | 19.4             | 35         | 1.0          | FDA2NK905K662KL5 |
| 800 | 10                      | 42         | 32   | 19   | 37.5 | \     | 7.0               | 350            | 1050            | 18.0                            | 28     | 17.0             | 35         | 1.0          | FDA2NK106K212KL5 |
| 800 | 12                      | 42         | 32   | 19   | 37.5 | \     | 8.0               | 420            | 1260            | 12.0                            | 28     | 19.5             | 35         | 1.0          | FDA2NK126K212KL5 |
| 800 | 14                      | 42         | 32   | 19   | 37.5 | \     | 9.5               | 490            | 1470            | 11.0                            | 28     | 15.1             | 35         | 1.0          | FDA2NK146K212KL5 |
| 800 | 15                      | 42         | 40   | 20   | 37.5 | 10.2  | 12.5              | 525            | 1575            | 9.0                             | 30     | 10.7             | 35         | 1.2          | FDA2NK156K244KB5 |
| 800 | 20                      | 42         | 44   | 24   | 37.5 | 10.2  | 13.5              | 700            | 2100            | 8.0                             | 30     | 10.3             | 35         | 1.2          | FDA2NK206K324KB5 |
| 800 | 25                      | 42         | 44   | 24   | 37.5 | 10.2  | 16.5              | 875            | 2625            | 6.5                             | 30     | 8.5              | 35         | 1.2          | FDA2NK256K324KB5 |
| 800 | 30                      | 42         | 45   | 30   | 37.5 | 20.3  | 20.0              | 1050           | 3150            | 5.8                             | 30     | 6.5              | 35         | 1.2          | FDA2NK306K424KD5 |
| 800 | 35                      | 42         | 50   | 35   | 37.5 | 20.3  | 22.0              | 1225           | 3675            | 5.5                             | 30     | 5.6              | 35         | 1.2          | FDA2NK356K474KD5 |
| 800 | 40                      | 42         | 50   | 35   | 37.5 | 20.3  | 25.0              | 1400           | 4200            | 4.8                             | 30     | 5.0              | 35         | 1.2          | FDA2NK406K474KD5 |
| 800 | 45                      | 42         | 55   | 40   | 37.5 | 20.3  | 28.0              | 1575           | 4725            | 4.0                             | 30     | 4.8              | 35         | 1.2          | FDA2NK456K494KD5 |
| 800 | 50                      | 42         | 55   | 40   | 37.5 | 20.3  | 31.0              | 1750           | 5250            | 3.6                             | 30     | 4.3              | 35         | 1.2          | FDA2NK506K494KD5 |
| 800 | 55                      | 42         | 60   | 45   | 37.5 | 20.3  | 32.5              | 1925           | 5775            | 3.4                             | 30     | 4.2              | 35         | 1.2          | FDA2NK556K524KD5 |
| 800 | 60                      | 42         | 60   | 45   | 37.5 | 20.3  | 34.0              | 2100           | 6300            | 3.2                             | 30     | 4.1              | 35         | 1.2          | FDA2NK606K524KD5 |
| 800 | 65                      | 42         | 60   | 45   | 37.5 | 20.3  | 35.0              | 2275           | 6825            | 2.8                             | 30     | 4.4              | 35         | 1.2          | FDA2NK656K524KD5 |
| 800 | 25                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 8.5               | 500            | 1500            | 12.0                            | 35     | 17.3             | 20         | 1.2          | FDA2NK256M104MB5 |
| 800 | 30                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 10.0              | 600            | 1800            | 10.5                            | 35     | 14.3             | 20         | 1.2          | FDA2NK306M104MB5 |
| 800 | 35                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 12.0              | 700            | 2100            | 9.5                             | 35     | 11.0             | 20         | 1.2          | FDA2NK356M104MB5 |
| 800 | 40                      | 57.5       | 45   | 30   | 52.5 | 20.3  | 14.0              | 800            | 2400            | 8.5                             | 35     | 9.0              | 20         | 1.2          | FDA2NK406M164MD5 |
| 800 | 45                      | 57.5       | 45   | 30   | 52.5 | 20.3  | 15.5              | 900            | 2700            | 7.0                             | 35     | 8.9              | 20         | 1.2          | FDA2NK456M164MD5 |
| 800 | 50                      | 57.5       | 50   | 35   | 52.5 | 20.3  | 17.0              | 1000           | 3000            | 5.8                             | 35     | 8.9              | 20         | 1.2          | FDA2NK506M204MD5 |
| 800 | 55                      | 57.5       | 50   | 35   | 52.5 | 20.3  | 19.0              | 1100           | 3300            | 5.5                             | 35     | 7.6              | 20         | 1.2          | FDA2NK556M204MD5 |
| 800 | 60                      | 57.5       | 50   | 35   | 52.5 | 20.3  | 21.0              | 1200           | 3600            | 4.8                             | 35     | 7.1              | 20         | 1.2          | FDA2NK606M204MD5 |

# Metalized Polypropylene Film DC-Link Capacitors

## FDA Series - 450 ~ 1200VDC



### Rating and Part Number

| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz<br>A 70°C | Peak Current<br>A | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|------|-------------------------|------------|---------|---------|---------|----------|-------------------------|-------------------|--------------------|---------------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|      |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |                         |                   |                    |                                       |           |                     |               |                 |                  |
| 800  | 65                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 22.5                    | 1300              | 3900               | 4.6                                   | 35        | 6.4                 | 20            | 1.2             | FDA2NK656M324MD5 |
| 800  | 70                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 24.0                    | 1400              | 4200               | 4.5                                   | 35        | 5.8                 | 20            | 1.2             | FDA2NK706M324MD5 |
| 800  | 75                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 25.5                    | 1500              | 4500               | 4.3                                   | 35        | 5.4                 | 20            | 1.2             | FDA2NK756M324MD5 |
| 800  | 80                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0                    | 1600              | 4800               | 4.2                                   | 35        | 5.3                 | 20            | 1.2             | FDA2NK806M324MD5 |
| 800  | 90                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 27.5                    | 1800              | 5400               | 4.0                                   | 35        | 5.0                 | 20            | 1.2             | FDA2NK906M324MD5 |
| 800  | 100                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 31.5                    | 2000              | 6000               | 3.2                                   | 35        | 4.7                 | 20            | 1.2             | FDA2NK107M344MD5 |
| 800  | 110                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 34.0                    | 2200              | 6600               | 3.0                                   | 35        | 4.3                 | 20            | 1.2             | FDA2NK117M344MD5 |
| 900  | 1                       | 32         | 18      | 9       | 27.5    | \        | 2.0                     | 70                | 210                | 65.0                                  | 25        | 57.7                | 70            | 0.8             | FDA2QK105G152GL5 |
| 900  | 2                       | 32         | 20      | 11      | 27.5    | \        | 3.2                     | 140               | 420                | 38.0                                  | 25        | 38.5                | 70            | 0.8             | FDA2QK205G182GL5 |
| 900  | 3                       | 32         | 22      | 13      | 27.5    | \        | 4.8                     | 210               | 630                | 30.0                                  | 25        | 21.7                | 70            | 0.8             | FDA2QK305G212GL5 |
| 900  | 4                       | 32         | 24.5    | 15      | 27.5    | \        | 6.0                     | 280               | 840                | 20.5                                  | 25        | 20.3                | 70            | 0.8             | FDA2QK405G272GL5 |
| 900  | 5                       | 32         | 30      | 16      | 27.5    | \        | 7.5                     | 350               | 1050               | 12.0                                  | 25        | 22.2                | 70            | 0.8             | FDA2QK505G322GL5 |
| 900  | 6                       | 32         | 33      | 18      | 27.5    | \        | 7.8                     | 420               | 1260               | 11.5                                  | 25        | 21.4                | 70            | 0.8             | FDA2QK605G342GL5 |
| 900  | 7                       | 32         | 33      | 18      | 27.5    | \        | 10.5                    | 490               | 1470               | 10.2                                  | 25        | 13.3                | 70            | 0.8             | FDA2QK705G342GL5 |
| 900  | 8                       | 32         | 37      | 22      | 27.5    | \        | 11.5                    | 560               | 1680               | 9.5                                   | 25        | 11.9                | 70            | 0.8             | FDA2QK805G402GL5 |
| 900  | 8                       | 32         | 37      | 22      | 27.5    | 10.2     | 12.5                    | 560               | 1680               | 9.0                                   | 25        | 10.7                | 70            | 1.0             | FDA2QK805G404GB5 |
| 900  | 9                       | 32         | 37      | 22      | 27.5    | \        | 11.8                    | 630               | 1890               | 9.7                                   | 25        | 11.1                | 70            | 0.8             | FDA2QK905G402GL5 |
| 900  | 9                       | 32         | 37      | 22      | 27.5    | 10.2     | 14.0                    | 630               | 1890               | 7.8                                   | 25        | 9.8                 | 70            | 1.0             | FDA2QK905G404GB5 |
| 900  | 10                      | 32         | 37      | 22      | 27.5    | \        | 12.0                    | 700               | 2100               | 9.5                                   | 25        | 11.0                | 70            | 0.8             | FDA2QK106G402GL5 |
| 900  | 10                      | 32         | 37      | 22      | 27.5    | 10.2     | 15.5                    | 700               | 2100               | 7.2                                   | 25        | 8.7                 | 70            | 1.0             | FDA2QK106G404GB5 |
| 900  | 5                       | 42         | 30      | 17      | 37.5    | \        | 3.8                     | 175               | 525                | 28.0                                  | 28        | 37.1                | 35            | 1.0             | FDA2QK505K662KL5 |
| 900  | 6                       | 42         | 30      | 17      | 37.5    | \        | 4.5                     | 210               | 630                | 25.0                                  | 28        | 29.6                | 35            | 1.0             | FDA2QK605K662KL5 |
| 900  | 7                       | 42         | 30      | 17      | 37.5    | \        | 5.0                     | 245               | 735                | 22.0                                  | 28        | 27.3                | 35            | 1.0             | FDA2QK705K662KL5 |
| 900  | 8                       | 42         | 32      | 19      | 37.5    | \        | 6.0                     | 280               | 840                | 19.5                                  | 28        | 21.4                | 35            | 1.0             | FDA2QK805K212KL5 |
| 900  | 10                      | 42         | 40      | 20      | 37.5    | 10.2     | 7.5                     | 350               | 1050               | 13.0                                  | 30        | 20.5                | 35            | 1.2             | FDA2QK106K244KB5 |
| 900  | 12                      | 42         | 37      | 22      | 37.5    | 10.2     | 9.0                     | 420               | 1260               | 11.5                                  | 30        | 16.1                | 35            | 1.2             | FDA2QK126K274KB5 |
| 900  | 15                      | 42         | 44      | 24      | 37.5    | 10.2     | 10.5                    | 525               | 1575               | 10.5                                  | 30        | 13.0                | 35            | 1.2             | FDA2QK156K324KB5 |
| 900  | 18                      | 42         | 44      | 24      | 37.5    | 10.2     | 13.0                    | 630               | 1890               | 8.8                                   | 30        | 10.1                | 35            | 1.2             | FDA2QK186K324KB5 |
| 900  | 20                      | 42         | 44      | 24      | 37.5    | 10.2     | 14.5                    | 700               | 2100               | 7.5                                   | 30        | 9.5                 | 35            | 1.2             | FDA2QK206K324KB5 |
| 900  | 25                      | 42         | 45      | 30      | 37.5    | 20.3     | 17.5                    | 875               | 2625               | 6.2                                   | 30        | 7.9                 | 35            | 1.2             | FDA2QK256K424KD5 |
| 900  | 30                      | 42         | 50      | 35      | 37.5    | 20.3     | 21.5                    | 1050              | 3150               | 5.0                                   | 30        | 6.5                 | 35            | 1.2             | FDA2QK306K474KD5 |
| 900  | 35                      | 42         | 55      | 40      | 37.5    | 20.3     | 23.0                    | 1225              | 3675               | 4.6                                   | 30        | 6.2                 | 35            | 1.2             | FDA2QK356K494KD5 |
| 900  | 40                      | 42         | 55      | 40      | 37.5    | 20.3     | 26.5                    | 1400              | 4200               | 3.9                                   | 30        | 5.5                 | 35            | 1.2             | FDA2QK406K494KD5 |
| 900  | 45                      | 42         | 60      | 45      | 37.5    | 20.3     | 30.0                    | 1575              | 4725               | 3.4                                   | 30        | 4.9                 | 35            | 1.2             | FDA2QK456K524KD5 |
| 900  | 50                      | 42         | 60      | 45      | 37.5    | 20.3     | 33.5                    | 1750              | 5250               | 3.0                                   | 30        | 4.5                 | 35            | 1.2             | FDA2QK506K524KD5 |
| 900  | 15                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 5.5                     | 300               | 900                | 22.0                                  | 35        | 22.5                | 20            | 1.2             | FDA2QK156M104MB5 |
| 900  | 20                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 7.5                     | 400               | 1200               | 13.5                                  | 35        | 19.8                | 20            | 1.2             | FDA2QK206M104MB5 |
| 900  | 25                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 9.0                     | 500               | 1500               | 11.5                                  | 35        | 16.1                | 20            | 1.2             | FDA2QK256M104MB5 |
| 900  | 30                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 11.0                    | 600               | 1800               | 10.0                                  | 35        | 12.4                | 20            | 1.2             | FDA2QK306M164MD5 |
| 900  | 35                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5                    | 700               | 2100               | 9.0                                   | 35        | 10.7                | 20            | 1.2             | FDA2QK356M164MD5 |
| 900  | 40                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.5                    | 800               | 2400               | 7.5                                   | 35        | 9.5                 | 20            | 1.2             | FDA2QK406M204MD5 |
| 900  | 45                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 16.0                    | 900               | 2700               | 6.8                                   | 35        | 8.6                 | 20            | 1.2             | FDA2QK456M204MD5 |
| 900  | 50                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.0                    | 1000              | 3000               | 6.4                                   | 35        | 7.2                 | 20            | 1.2             | FDA2QK506M204MD5 |
| 900  | 55                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 20.0                    | 1100              | 3300               | 5.6                                   | 35        | 6.7                 | 20            | 1.2             | FDA2QK556M324MD5 |
| 900  | 60                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 21.5                    | 1200              | 3600               | 4.8                                   | 35        | 6.8                 | 20            | 1.2             | FDA2QK606M324MD5 |
| 900  | 65                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 23.0                    | 1300              | 3900               | 4.5                                   | 35        | 6.3                 | 20            | 1.2             | FDA2QK656M324MD5 |
| 900  | 70                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 25.0                    | 1400              | 4200               | 4.0                                   | 35        | 6.0                 | 20            | 1.2             | FDA2QK706M344MD5 |
| 900  | 75                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 25.5                    | 1500              | 4500               | 3.9                                   | 35        | 5.9                 | 20            | 1.2             | FDA2QK756M344MD5 |
| 900  | 80                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 26.5                    | 1600              | 4800               | 3.8                                   | 35        | 5.6                 | 20            | 1.2             | FDA2QK806M344MD5 |
| 900  | 85                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 28.5                    | 1700              | 5100               | 3.6                                   | 35        | 5.1                 | 20            | 1.2             | FDA2QK856M344MD5 |
| 1000 | 1                       | 32         | 18      | 9       | 27.5    | \        | 2.0                     | 75                | 225                | 65.0                                  | 25        | 57.7                | 75            | 0.8             | FDA3KK105G152GL5 |
| 1000 | 2                       | 32         | 22      | 13      | 27.5    | \        | 3.5                     | 150               | 450                | 38.0                                  | 25        | 32.2                | 75            | 0.8             | FDA3KK205G212GL5 |
| 1000 | 3                       | 32         | 24.5    | 15      | 27.5    | \        | 5.0                     | 225               | 675                | 22.0                                  | 25        | 27.3                | 75            | 0.8             | FDA3KK305G272GL5 |
| 1000 | 4                       | 32         | 30      | 16      | 27.5    | \        | 7.0                     | 300               | 900                | 16.5                                  | 25        | 18.6                | 75            | 0.8             | FDA3KK405G322GL5 |
| 1000 | 5                       | 32         | 33      | 18      | 27.5    | \        | 8.5                     | 375               | 1125               | 12.5                                  | 25        | 16.6                | 75            | 0.8             | FDA3KK505G342GL5 |
| 1000 | 6                       | 32         | 33      | 18      | 27.5    | \        | 9.0                     | 450               | 1350               | 11.5                                  | 25        | 16.1                | 75            | 0.8             | FDA3KK605G342GL5 |

# Metalized Polypropylene Film DC-Link Capacitors

## FDA Series - 450 ~ 1200VDC

### Rating and Part Number

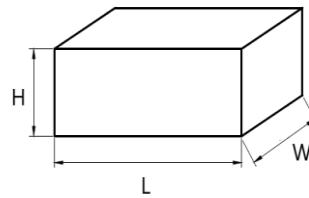
| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |      |      |      |       | Irms 10KHz A 70°C | Peak Current A | Surge Current A | ESR <sub>Typical</sub> 10KHz mΩ | ESL nH | Thermal Res °C/W | dv/dt V/us | Lead Wire mm | Part Number      |
|------|-------------------------|------------|------|------|------|-------|-------------------|----------------|-----------------|---------------------------------|--------|------------------|------------|--------------|------------------|
|      |                         | W mm       | H mm | T mm | P mm | P1 mm |                   |                |                 |                                 |        |                  |            |              |                  |
| 1000 | 7                       | 32         | 37   | 22   | 27.5 | \     | 9.5               | 525            | 1575            | 11.0                            | 25     | 15.1             | 75         | 0.8          | FDA3KK705G402GL5 |
| 1000 | 7                       | 32         | 37   | 22   | 27.5 | 10.2  | 11.5              | 525            | 1575            | 9.8                             | 25     | 11.6             | 75         | 1.0          | FDA3KK705G404GB5 |
| 1000 | 8                       | 32         | 37   | 22   | 27.5 | \     | 10.5              | 600            | 1800            | 10.5                            | 25     | 13.0             | 75         | 0.8          | FDA3KK805G402GL5 |
| 1000 | 8                       | 32         | 37   | 22   | 27.5 | 10.2  | 13.0              | 600            | 1800            | 8.8                             | 25     | 10.1             | 75         | 1.0          | FDA3KK805G404GB5 |
| 1000 | 5                       | 42         | 30   | 17   | 37.5 | \     | 3.8               | 175            | 525             | 28.0                            | 28     | 37.1             | 35         | 1.0          | FDA3KK505K662KL5 |
| 1000 | 6                       | 42         | 30   | 17   | 37.5 | \     | 4.5               | 210            | 630             | 25.0                            | 28     | 29.6             | 35         | 1.0          | FDA3KK605K662KL5 |
| 1000 | 7                       | 42         | 30   | 17   | 37.5 | \     | 5.0               | 245            | 735             | 22.0                            | 28     | 27.3             | 35         | 1.0          | FDA3KK705K662KL5 |
| 1000 | 8                       | 42         | 32   | 19   | 37.5 | \     | 6.0               | 280            | 840             | 19.5                            | 28     | 21.4             | 35         | 1.0          | FDA3KK805K212KL5 |
| 1000 | 10                      | 42         | 40   | 20   | 37.5 | 10.2  | 7.5               | 350            | 1050            | 13.0                            | 30     | 20.5             | 35         | 1.2          | FDA3KK106K244KB5 |
| 1000 | 12                      | 42         | 37   | 22   | 37.5 | 10.2  | 9.0               | 420            | 1260            | 11.5                            | 30     | 16.1             | 35         | 1.2          | FDA3KK126K274KB5 |
| 1000 | 15                      | 42         | 44   | 24   | 37.5 | 10.2  | 11.5              | 525            | 1575            | 10.0                            | 30     | 11.3             | 35         | 1.2          | FDA3KK156K324KB5 |
| 1000 | 18                      | 42         | 45   | 30   | 37.5 | 20.3  | 14.0              | 630            | 1890            | 7.8                             | 30     | 9.8              | 35         | 1.2          | FDA3KK186K424KD5 |
| 1000 | 20                      | 42         | 45   | 30   | 37.5 | 20.3  | 15.5              | 700            | 2100            | 7.0                             | 30     | 8.9              | 35         | 1.2          | FDA3KK206K424KD5 |
| 1000 | 25                      | 42         | 50   | 35   | 37.5 | 20.3  | 19.5              | 875            | 2625            | 5.5                             | 30     | 7.2              | 35         | 1.2          | FDA3KK256K474KD5 |
| 1000 | 30                      | 42         | 55   | 40   | 37.5 | 20.3  | 23.0              | 1050           | 3150            | 4.6                             | 30     | 6.2              | 35         | 1.2          | FDA3KK306K494KD5 |
| 1000 | 35                      | 42         | 55   | 40   | 37.5 | 20.3  | 25.0              | 1225           | 3675            | 4.0                             | 30     | 6.0              | 35         | 1.2          | FDA3KK356K494KD5 |
| 1000 | 40                      | 42         | 60   | 45   | 37.5 | 20.3  | 28.5              | 1400           | 4200            | 3.6                             | 30     | 5.1              | 35         | 1.2          | FDA3KK406K524KD5 |
| 1000 | 15                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 5.8               | 300            | 900             | 19.8                            | 35     | 22.5             | 20         | 1.2          | FDA3KK156M104MB5 |
| 1000 | 20                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 7.5               | 400            | 1200            | 13.5                            | 35     | 19.8             | 20         | 1.2          | FDA3KK206M104MB5 |
| 1000 | 25                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 9.5               | 500            | 1500            | 11.0                            | 35     | 15.1             | 20         | 1.2          | FDA3KK256M104MB5 |
| 1000 | 30                      | 57.5       | 45   | 30   | 52.5 | 20.3  | 11.5              | 600            | 1800            | 9.8                             | 35     | 11.6             | 20         | 1.2          | FDA3KK306M164MD5 |
| 1000 | 35                      | 57.5       | 45   | 30   | 52.5 | 20.3  | 13.5              | 700            | 2100            | 8.0                             | 35     | 10.3             | 20         | 1.2          | FDA3KK356M164MD5 |
| 1000 | 40                      | 57.5       | 50   | 35   | 52.5 | 20.3  | 15.5              | 800            | 2400            | 7.0                             | 35     | 8.9              | 20         | 1.2          | FDA3KK406M204MD5 |
| 1000 | 45                      | 57.5       | 55   | 45   | 52.5 | 20.3  | 17.5              | 900            | 2700            | 6.2                             | 35     | 7.9              | 20         | 1.2          | FDA3KK456M324MD5 |
| 1000 | 50                      | 57.5       | 55   | 45   | 52.5 | 20.3  | 19.5              | 1000           | 3000            | 5.8                             | 35     | 6.8              | 20         | 1.2          | FDA3KK506M324MD5 |
| 1000 | 55                      | 57.5       | 55   | 45   | 52.5 | 20.3  | 21.0              | 1100           | 3300            | 5.0                             | 35     | 6.8              | 20         | 1.2          | FDA3KK556M324MD5 |
| 1000 | 60                      | 57.5       | 65   | 45   | 52.5 | 20.3  | 23.0              | 1200           | 3600            | 4.6                             | 35     | 6.2              | 20         | 1.2          | FDA3KK606M344MD5 |
| 1000 | 65                      | 57.5       | 65   | 45   | 52.5 | 20.3  | 25.0              | 1300           | 3900            | 4.2                             | 35     | 5.7              | 20         | 1.2          | FDA3KK656M344MD5 |
| 1000 | 70                      | 57.5       | 65   | 45   | 52.5 | 20.3  | 27.0              | 1400           | 4200            | 3.8                             | 35     | 5.4              | 20         | 1.2          | FDA3KK706M344MD5 |
| 1100 | 1                       | 32         | 20   | 11   | 27.5 | \     | 2.2               | 80             | 240             | 65.0                            | 25     | 47.7             | 80         | 0.8          | FDA3MK105G182GL5 |
| 1100 | 1.5                     | 32         | 22   | 13   | 27.5 | \     | 2.5               | 120            | 360             | 46.0                            | 25     | 52.2             | 80         | 0.8          | FDA3MK155G212GL5 |
| 1100 | 2                       | 32         | 24.5 | 13   | 27.5 | \     | 4.8               | 160            | 480             | 24.5                            | 25     | 26.6             | 80         | 0.8          | FDA3MK205G222GL5 |
| 1100 | 3                       | 32         | 30   | 16   | 27.5 | \     | 6.5               | 240            | 720             | 18.5                            | 25     | 19.2             | 80         | 0.8          | FDA3MK305G322GL5 |
| 1100 | 4                       | 32         | 33   | 18   | 27.5 | \     | 8.5               | 320            | 960             | 12.5                            | 25     | 16.6             | 80         | 0.8          | FDA3MK405G342GL5 |
| 1100 | 5                       | 32         | 37   | 22   | 27.5 | \     | 9.8               | 400            | 1200            | 10.8                            | 25     | 14.5             | 80         | 0.8          | FDA3MK505G402GL5 |
| 1100 | 5                       | 32         | 37   | 22   | 27.5 | 10.2  | 10.5              | 400            | 1200            | 10.5                            | 25     | 13.0             | 80         | 1.0          | FDA3MK505G404GB5 |
| 1100 | 6                       | 32         | 37   | 22   | 27.5 | \     | 10.5              | 480            | 1440            | 10.5                            | 25     | 13.0             | 80         | 0.8          | FDA3MK605G402GL5 |
| 1100 | 6                       | 32         | 37   | 22   | 27.5 | 10.2  | 13.0              | 480            | 1440            | 8.8                             | 25     | 10.1             | 80         | 1.0          | FDA3MK605G404GB5 |
| 1100 | 3                       | 42         | 30   | 17   | 37.5 | \     | 2.5               | 120            | 360             | 46.0                            | 28     | 52.2             | 40         | 1.0          | FDA3MK305K662KL5 |
| 1100 | 4                       | 42         | 30   | 17   | 37.5 | \     | 3.5               | 160            | 480             | 32.5                            | 28     | 37.7             | 40         | 1.0          | FDA3MK405K662KL5 |
| 1100 | 4.7                     | 42         | 32   | 19   | 37.5 | \     | 4.0               | 188            | 564             | 28.0                            | 28     | 33.5             | 40         | 1.0          | FDA3MK475K212KL5 |
| 1100 | 5                       | 42         | 32   | 19   | 37.5 | \     | 4.2               | 200            | 600             | 26.0                            | 28     | 32.7             | 40         | 1.0          | FDA3MK505K212KL5 |
| 1100 | 6                       | 42         | 32   | 19   | 37.5 | \     | 5.0               | 240            | 720             | 23.5                            | 28     | 25.5             | 40         | 1.0          | FDA3MK605K212KL5 |
| 1100 | 7                       | 42         | 40   | 20   | 37.5 | 10.2  | 6.0               | 280            | 840             | 18.5                            | 30     | 22.5             | 40         | 1.2          | FDA3MK705K244KB5 |
| 1100 | 8                       | 42         | 37   | 22   | 37.5 | 10.2  | 6.5               | 320            | 960             | 16.5                            | 30     | 21.5             | 40         | 1.2          | FDA3MK805K274KB5 |
| 1100 | 9                       | 42         | 37   | 22   | 37.5 | 10.2  | 7.5               | 360            | 1080            | 13.0                            | 30     | 20.5             | 40         | 1.2          | FDA3MK905K274KB5 |
| 1100 | 10                      | 42         | 44   | 24   | 37.5 | 10.2  | 8.5               | 400            | 1200            | 12.0                            | 30     | 17.3             | 40         | 1.2          | FDA3MK106K324KB5 |
| 1100 | 12                      | 42         | 44   | 24   | 37.5 | 10.2  | 10.0              | 480            | 1440            | 10.8                            | 30     | 13.9             | 40         | 1.2          | FDA3MK126K324KB5 |
| 1100 | 14                      | 42         | 45   | 30   | 37.5 | 20.3  | 12.0              | 560            | 1680            | 9.5                             | 30     | 11.0             | 40         | 1.2          | FDA3MK146K424KD5 |
| 1100 | 15                      | 42         | 45   | 30   | 37.5 | 20.3  | 13.0              | 600            | 1800            | 8.5                             | 30     | 10.4             | 40         | 1.2          | FDA3MK156K424KD5 |
| 1100 | 18                      | 42         | 50   | 35   | 37.5 | 20.3  | 15.0              | 720            | 2160            | 7.0                             | 30     | 9.5              | 40         | 1.2          | FDA3MK186K474KD5 |
| 1100 | 20                      | 42         | 50   | 35   | 37.5 | 20.3  | 16.5              | 800            | 2400            | 6.5                             | 30     | 8.5              | 40         | 1.2          | FDA3MK206K474KD5 |
| 1100 | 25                      | 42         | 55   | 40   | 37.5 | 20.3  | 20.5              | 1000           | 3000            | 5.0                             | 30     | 7.1              | 40         | 1.2          | FDA3MK256K494KD5 |
| 1100 | 30                      | 42         | 60   | 45   | 37.5 | 20.3  | 24.5              | 1200           | 3600            | 4.3                             | 30     | 5.8              | 40         | 1.2          | FDA3MK306K524KD5 |
| 1100 | 15                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 6.5               | 300            | 900             | 16.5                            | 35     | 21.5             | 20         | 1.2          | FDA3MK156M104MB5 |
| 1100 | 20                      | 57.5       | 45   | 30   | 52.5 | 20.3  | 9.0               | 400            | 1200            | 11.5                            | 35     | 16.1             | 20         | 1.2          | FDA3MK206M164MD5 |

### Rating and Part Number

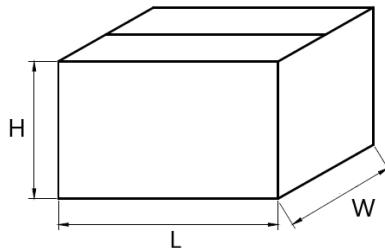
| Vdc  | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz<br>A 70°C | Peak Current<br>A | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|------|-----------------|------------|---------|---------|---------|----------|-------------------------|-------------------|--------------------|---------------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|      |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |                         |                   |                    |                                       |           |                     |               |                 |                  |
| 1100 | 25              | 57.5       | 50      | 35      | 52.5    | 20.3     | 11.0                    | 500               | 1500               | 10.0                                  | 35        | 12.4                | 20            | 1.2             | FDA3MK256M204MD5 |
| 1100 | 30              | 57.5       | 50      | 35      | 52.5    | 20.3     | 13.0                    | 600               | 1800               | 8.6                                   | 35        | 10.3                | 20            | 1.2             | FDA3MK306M204MD5 |
| 1100 | 35              | 57.5       | 55      | 45      | 52.5    | 20.3     | 14.5                    | 700               | 2100               | 7.5                                   | 35        | 9.5                 | 20            | 1.2             | FDA3MK356M324MD5 |
| 1100 | 40              | 57.5       | 55      | 45      | 52.5    | 20.3     | 16.0                    | 800               | 2400               | 6.8                                   | 35        | 8.6                 | 20            | 1.2             | FDA3MK406M324MD5 |
| 1100 | 45              | 57.5       | 55      | 45      | 52.5    | 20.3     | 17.5                    | 900               | 2700               | 6.2                                   | 35        | 7.9                 | 20            | 1.2             | FDA3MK456M324MD5 |
| 1100 | 50              | 57.5       | 65      | 45      | 52.5    | 20.3     | 19.5                    | 1000              | 3000               | 5.6                                   | 35        | 7.0                 | 20            | 1.2             | FDA3MK506M344MD5 |
| 1100 | 55              | 57.5       | 65      | 45      | 52.5    | 20.3     | 21.5                    | 1100              | 3300               | 4.8                                   | 35        | 6.8                 | 20            | 1.2             | FDA3MK556M344MD5 |
| 1200 | 1               | 32         | 20      | 11      | 27.5    | \        | 3.5                     | 90                | 270                | 35.0                                  | 25        | 35.0                | 90            | 0.8             | FDA3BK105G182GL5 |
| 1200 | 2               | 32         | 24.5    | 15      | 27.5    | \        | 5.0                     | 180               | 540                | 24.0                                  | 25        | 25.0                | 90            | 0.8             | FDA3BK205G272GL5 |
| 1200 | 3               | 32         | 30      | 16      | 27.5    | \        | 7.5                     | 270               | 810                | 13.0                                  | 25        | 20.5                | 90            | 0.8             | FDA3BK305G322GL5 |
| 1200 | 4               | 32         | 33      | 18      | 27.5    | \        | 9.5                     | 360               | 1080               | 11.0                                  | 25        | 15.1                | 90            | 0.8             | FDA3BK405G342GL5 |
| 1200 | 5               | 32         | 37      | 22      | 27.5    | \        | 10.5                    | 450               | 1350               | 10.5                                  | 25        | 13.0                | 90            | 0.8             | FDA3BK505G402GL5 |
| 1200 | 5               | 32         | 37      | 22      | 27.5    | 10.2     | 12.0                    | 450               | 1350               | 9.5                                   | 25        | 11.0                | 90            | 1.0             | FDA3BK505G404GB5 |
| 1200 | 3               | 42         | 30      | 17      | 37.5    | \        | 3.2                     | 135               | 405                | 35.0                                  | 28        | 41.9                | 45            | 1.0             | FDA3BK305K662KL5 |
| 1200 | 4               | 42         | 30      | 17      | 37.5    | \        | 4.2                     | 180               | 540                | 28.0                                  | 28        | 30.4                | 45            | 1.0             | FDA3BK405K662KL5 |
| 1200 | 5               | 42         | 32      | 19      | 37.5    | \        | 5.5                     | 225               | 675                | 21.5                                  | 28        | 23.1                | 45            | 1.0             | FDA3BK505K212KL5 |
| 1200 | 6               | 42         | 40      | 20      | 37.5    | 10.2     | 6.5                     | 270               | 810                | 16.5                                  | 30        | 21.5                | 45            | 1.2             | FDA3BK605K244KB5 |
| 1200 | 7               | 42         | 37      | 22      | 37.5    | 10.2     | 7.5                     | 315               | 945                | 13.0                                  | 30        | 20.5                | 45            | 1.2             | FDA3BK705K274KB5 |
| 1200 | 8               | 42         | 44      | 24      | 37.5    | 10.2     | 8.5                     | 360               | 1080               | 12.0                                  | 30        | 17.3                | 45            | 1.2             | FDA3BK805K324KB5 |
| 1200 | 9               | 42         | 44      | 24      | 37.5    | 10.2     | 10.0                    | 405               | 1215               | 10.8                                  | 30        | 13.9                | 45            | 1.2             | FDA3BK905K324KB5 |
| 1200 | 10              | 42         | 44      | 24      | 37.5    | 10.2     | 11.0                    | 450               | 1350               | 10.0                                  | 30        | 12.4                | 45            | 1.2             | FDA3BK106K324KB5 |
| 1200 | 12              | 42         | 45      | 30      | 37.5    | 20.3     | 13.0                    | 540               | 1620               | 8.5                                   | 30        | 10.4                | 45            | 1.2             | FDA3BK126K424KD5 |
| 1200 | 15              | 42         | 50      | 35      | 37.5    | 20.3     | 16.0                    | 675               | 2025               | 6.8                                   | 30        | 8.6                 | 45            | 1.2             | FDA3BK156K474KD5 |
| 1200 | 18              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0                    | 810               | 2430               | 6.2                                   | 30        | 7.5                 | 45            | 1.2             | FDA3BK186K474KD5 |
| 1200 | 20              | 42         | 55      | 40      | 37.5    | 20.3     | 20.0                    | 900               | 2700               | 5.5                                   | 30        | 6.8                 | 45            | 1.2             | FDA3BK206K494KD5 |
| 1200 | 25              | 42         | 60      | 45      | 37.5    | 20.3     | 25.0                    | 1125              | 3375               | 4.3                                   | 30        | 5.6                 | 45            | 1.2             | FDA3BK256K524KD5 |
| 1200 | 12              | 57.5       | 45      | 25      | 52.5    | 10.2     | 6.5                     | 300               | 900                | 16.5                                  | 35        | 21.5                | 25            | 1.2             | FDA3BK126M104MB5 |
| 1200 | 15              | 57.5       | 45      | 25      | 52.5    | 10.2     | 7.5                     | 375               | 1125               | 13.0                                  | 35        | 20.5                | 25            | 1.2             | FDA3BK156M104MB5 |
| 1200 | 20              | 57.5       | 45      | 30      | 52.5    | 20.3     | 11.0                    | 500               | 1500               | 10.0                                  | 35        | 12.4                | 25            | 1.2             | FDA3BK206M164MD5 |
| 1200 | 25              | 57.5       | 50      | 35      | 52.5    | 20.3     | 13.0                    | 625               | 1875               | 8.6                                   | 35        | 10.3                | 25            | 1.2             | FDA3BK256M204MD5 |
| 1200 | 30              | 57.5       | 55      | 45      | 52.5    | 20.3     | 14.5                    | 750               | 2250               | 7.5                                   | 35        | 9.5                 | 25            | 1.2             | FDA3BK306M324MD5 |
| 1200 | 35              | 57.5       | 55      | 45      | 52.5    | 20.3     | 16.0                    | 875               | 2625               | 6.8                                   | 35        | 8.6                 | 25            | 1.2             | FDA3BK356M324MD5 |
| 1200 | 40              | 57.5       | 65      | 45      | 52.5    | 20.3     | 20.0                    | 1000              | 3000               | 5.5                                   | 35        | 6.8                 | 25            | 1.2             | FDA3BK406M344MD5 |
| 1200 | 45              | 57.5       | 65      | 45      | 52.5    | 20.3     | 22.5                    | 1125              | 3375               | 4.8                                   | 35        | 6.2                 | 25            | 1.2             | FDA3BK456M344MD5 |

## Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



## Packaging Quantity

| Pitch | Size Code | Dimension |      |    | Packaging Quantity |             |
|-------|-----------|-----------|------|----|--------------------|-------------|
|       |           | W         | H    | T  | Long Leads         | Short Leads |
| 27.5  | G15       | 32        | 18   | 9  | 340                | 340         |
|       | G18       | 32        | 20   | 11 | 280                | 280         |
|       | G21       | 32        | 22   | 13 | 230                | 230         |
|       | G22       | 32        | 24.5 | 13 | 230                | 230         |
|       | G26       | 32        | 28   | 14 | 220                | 220         |
|       | G27       | 32        | 24.5 | 15 | 200                | 200         |
|       | G32       | 32        | 30   | 16 | 190                | 190         |
|       | G34       | 32        | 33   | 18 | 170                | 170         |
|       | G40       | 32        | 37   | 22 | 140                | 140         |
| 37.5  | K21       | 42        | 32   | 19 | 112                | 112         |
|       | K24       | 42        | 40   | 20 | 105                | 105         |
|       | K27       | 42        | 37   | 22 | 98                 | 98          |
|       | K32       | 42        | 44   | 24 | 91                 | 91          |
|       | K37       | 42        | 37   | 28 | 77                 | 77          |
|       | K39       | 42        | 43   | 28 | 77                 | 77          |
|       | K42       | 42        | 45   | 30 | 70                 | 70          |
|       | K47       | 42        | 50   | 35 | 63                 | 63          |
|       | K49       | 42        | 55   | 40 | 49                 | 49          |
|       | K52       | 42        | 60   | 45 | 49                 | 49          |
| 52.5  | K66       | 42        | 30   | 17 | 126                | 126         |
|       | M10       | 57.5      | 45   | 25 | 60                 | 60          |
|       | M16       | 57.5      | 45   | 30 | 50                 | 50          |
|       | M20       | 57.5      | 50   | 35 | 45                 | 45          |
|       | M23       | 57.5      | 65   | 35 | 45                 | 45          |
|       | M32       | 57.5      | 55   | 45 | 35                 | 35          |
|       | M34       | 57.5      | 65   | 45 | 35                 | 35          |

## Overview

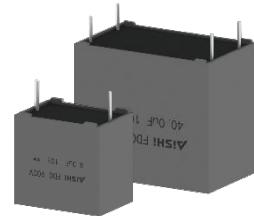
The FDG capacitor is constructed of metallized polypropylene film encapsulated with epoxy resin in a plastic box, with 2 or 4 tinned copper wire. These FDG series is suitable for harsh environment conditions and compliant to THB Grade IIIB.

## Applications

Widely used in high performance DC Link, DC filtering, frequency converters, industrial power supply, solar inverter and energy storage. Not suitable for across the line application.

## Features

- Self-healing
- High capacitance density
- Operating temperature range: -40°C to 105°C
- High ripple current and low loss
- High contact reliability
- Suitable for high frequency applications
- Suitable for harsh environmental conditions
- THB Grade IIIB (85°C, 85% RH, 1000h at U<sub>NDC</sub>)



## Applicable Standard

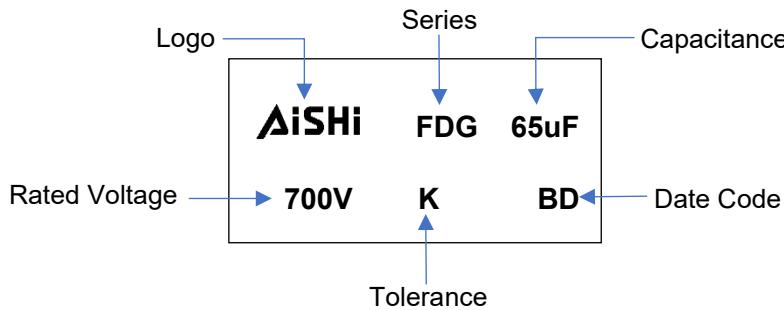
| Approval | Specification | File Number |
|----------|---------------|-------------|
|          | UL 810        | E500537     |



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 450Vdc to 1200Vdc  |
| Capacitance Range           | 1.0μF to 200μF   |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +105°C<br>(85°C ~ 105°C, decreasing factor 1.25% per °C for Rated Voltage)   |
| Climatic Category           | 40/85/56 IEC 60068-1   |
| Dissipation Factor          | ≤0.002 (0.2%) at 1KHz; C ≤20μF at 25°C<br>≤0.003 (0.3%) at 1KHz; C >20μF at 25°C<br>≤0.004 (0.4%) at 1KHz; C >80μF at 25°C |
| Insulation Resistance       | RC between leads, IR × C ≥ 30,000 s at 100vdc 1minute at +25°C   |

## Marking



## Part Number System

| <b>F</b>       | <b>DG</b>                                      | <b>2M</b>   | <b>K</b>                        | <b>656</b>  | <b>M20</b>               | <b>4MD</b>                   | <b>5</b>                        |
|----------------|--|---|---------------------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series   | Voltage (VDC)   | Tolerance                       | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | DC Link,<br>THB Type,<br>Metallized<br>PP Film | 450=2W<br>500=2H<br>550=2J<br>600=2K<br>700=2M<br>800=2N<br>900=2Q<br>1000=3K<br>1100=3M<br>1200=3B | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

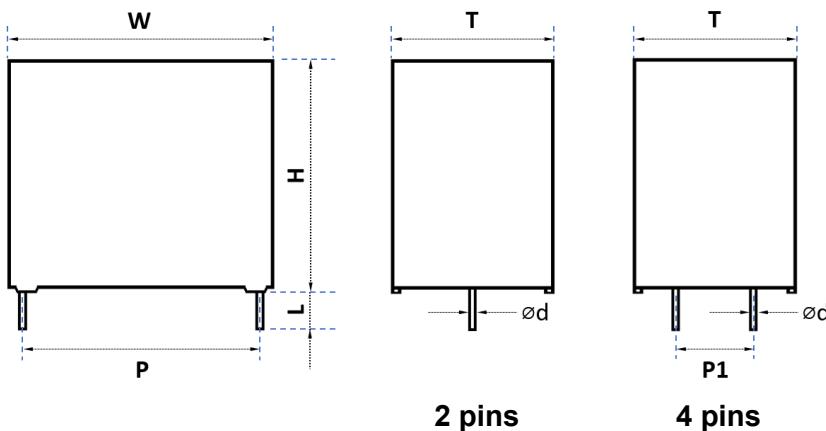
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 27.5mm                    | G | 10.2mm                            | B |
| 2 leads for straight cut          | 2 | 37.5mm                    | K | 12.7mm                            | G |
| 2 leads for forming cut           | E | 52.5mm                    | M | 20.3mm                            | D |
| 4 leads for straight cut          | 4 | N/A                       | N | N/A                               | L |
| 6 leads for straight cut          | 6 |                           |   |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 2.5mm       | A |
| 2.8mm       | C |
| 3.0mm       | 3 |
| 3.2mm       | 1 |
| 3.5mm       | 2 |
| 3.8mm       | E |
| 4.0mm       | 4 |
| 4.5mm       | D |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| 20.0mm min  | L |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |    |           | Pitch |           |      |           | $\varnothing d$ |         |           |
|-----------|-----------|-----------|------|-----------|----|-----------|-------|-----------|------|-----------|-----------------|---------|-----------|
|           | W         | Tolerance | H    | Tolerance | T  | Tolerance | P     | Tolerance | P1   | Tolerance | 4 Leads         | 2 Leads | Tolerance |
| G15       | 32        | 0.8       | 18   | 0.8       | 9  | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G22       | 32        | 0.8       | 24.5 | 0.8       | 13 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G27       | 32        | 0.8       | 24.5 | 0.8       | 15 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G32       | 32        | 0.8       | 30   | 0.8       | 16 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22 | 0.8       | 27.5  | 0.5       | 10.2 | 0.5       | 1.0             | 0.8     | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19 | 1.0       | 37.5  | 0.5       | \    | \         | \               | 1.0     | 0.05      |
| K24       | 42        | 1.0       | 40   | 1.0       | 20 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K27       | 42        | 1.0       | 37   | 1.0       | 22 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K32       | 42        | 1.0       | 44   | 1.0       | 24 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K37       | 42        | 1.0       | 37   | 1.0       | 28 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K39       | 42        | 1.0       | 43   | 1.0       | 28 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K42       | 42        | 1.0       | 45   | 1.0       | 30 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.0     | 0.05      |
| K47       | 42        | 1.0       | 50   | 1.0       | 35 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.0     | 0.05      |
| K49       | 42        | 1.0       | 55   | 1.0       | 40 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.0     | 0.05      |
| K52       | 42        | 1.0       | 60   | 1.0       | 45 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.0     | 0.05      |
| K66       | 42        | 1.0       | 30   | 1.0       | 17 | 1.0       | 37.5  | 0.5       | \    | \         | \               | 1.0     | 0.05      |
| M10       | 57.5      | 1.0       | 45   | 1.0       | 25 | 1.0       | 52.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.2     | 0.05      |
| M16       | 57.5      | 1.0       | 45   | 1.0       | 30 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M20       | 57.5      | 1.0       | 50   | 1.0       | 35 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M23       | 57.5      | 1.0       | 65   | 1.0       | 35 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M32       | 57.5      | 1.0       | 55   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M34       | 57.5      | 1.0       | 65   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |

# Metalized Polypropylene Film DC-Link Capacitors

## FDG Series - 450 ~ 1200VDC, THB Grade IIIB

### Rating and Part Number

| Vdc | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz<br>A 70°C | Peak Current<br>A | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-------------------------|------------|---------|---------|---------|----------|-------------------------|-------------------|--------------------|---------------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|     |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |                         |                   |                    |                                       |           |                     |               |                 |                  |
| 450 | 5                       | 32         | 20      | 11      | 27.5    | \        | 5.0                     | 325               | 975                | 20.0                                  | 25        | 30.0                | 65            | 0.8             | FDG2WK505G182GL5 |
| 450 | 10                      | 32         | 24.5    | 15      | 27.5    | \        | 7.0                     | 650               | 1950               | 11.0                                  | 25        | 27.8                | 65            | 0.8             | FDG2WK106G272GL5 |
| 450 | 15                      | 32         | 33      | 18      | 27.5    | \        | 11.0                    | 975               | 2925               | 7.0                                   | 25        | 17.7                | 65            | 0.8             | FDG2WK156G342GL5 |
| 450 | 22                      | 32         | 37      | 22      | 27.5    | \        | 11.0                    | 1430              | 4290               | 5.0                                   | 28        | 24.8                | 65            | 0.8             | FDG2WK226G402GL5 |
| 450 | 25                      | 32         | 37      | 22      | 27.5    | \        | 12.0                    | 1625              | 4875               | 4.8                                   | 28        | 24.8                | 65            | 0.8             | FDG2WK256G402GL5 |
| 450 | 30                      | 42         | 40      | 20      | 37.5    | 10.2     | 12.5                    | 1050              | 3150               | 7.5                                   | 30        | 12.8                | 35            | 1.2             | FDG2WK306K244KB5 |
| 450 | 35                      | 42         | 37      | 22      | 37.5    | 10.2     | 13.5                    | 1225              | 3675               | 7.0                                   | 30        | 11.8                | 35            | 1.2             | FDG2WK406K274KB5 |
| 450 | 40                      | 42         | 37      | 28      | 37.5    | 10.2     | 14.5                    | 1400              | 4200               | 6.2                                   | 30        | 11.5                | 35            | 1.2             | FDG2WK406K374KB5 |
| 450 | 50                      | 42         | 43      | 28      | 37.5    | 10.2     | 16.0                    | 1750              | 5250               | 5.0                                   | 30        | 11.7                | 35            | 1.2             | FDG2WK506K394KB5 |
| 450 | 50                      | 42         | 45      | 30      | 37.5    | 20.3     | 16.0                    | 1750              | 5250               | 5.0                                   | 30        | 11.7                | 35            | 1.2             | FDG2WK506K424KD5 |
| 450 | 60                      | 42         | 45      | 30      | 37.5    | 20.3     | 16.5                    | 2100              | 6300               | 4.5                                   | 30        | 12.2                | 35            | 1.2             | FDG2WK606K424KD5 |
| 450 | 80                      | 42         | 50      | 35      | 37.5    | 20.3     | 20.5                    | 2800              | 8400               | 3.8                                   | 30        | 12.2                | 35            | 1.2             | FDG2WK806K474KD5 |
| 450 | 110                     | 42         | 60      | 45      | 37.5    | 20.3     | 24.5                    | 3850              | 11550              | 3.6                                   | 30        | 12.2                | 35            | 1.2             | FDG2WK117K524KD5 |
| 450 | 130                     | 42         | 60      | 45      | 37.5    | 20.3     | 28.5                    | 4550              | 13650              | 3.0                                   | 30        | 12.2                | 35            | 1.2             | FDG2WK137K524KD5 |
| 450 | 75                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.5                    | 1500              | 4500               | 5.5                                   | 35        | 10.0                | 20            | 1.2             | FDG2WK756M164MD5 |
| 450 | 80                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 17.0                    | 1600              | 4800               | 5.0                                   | 35        | 10.4                | 20            | 1.2             | FDG2WK806M164MD5 |
| 450 | 100                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.0                    | 2000              | 6000               | 4.5                                   | 35        | 10.3                | 20            | 1.2             | FDG2WK107M204MD5 |
| 450 | 110                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 19.0                    | 2200              | 6600               | 4.0                                   | 35        | 10.4                | 20            | 1.2             | FDG2WK117M204MD5 |
| 450 | 120                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 21.5                    | 2400              | 7200               | 3.8                                   | 35        | 10.4                | 20            | 1.2             | FDG2WK127M204MD5 |
| 450 | 150                     | 57.5       | 65      | 35      | 52.5    | 20.3     | 24.5                    | 3000              | 9000               | 3.6                                   | 35        | 10.4                | 20            | 1.2             | FDG2WK157M234MD5 |
| 450 | 160                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 28.5                    | 3200              | 9600               | 3.0                                   | 35        | 10.4                | 20            | 1.2             | FDG2WK167M324MD5 |
| 450 | 200                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0                    | 4000              | 12000              | 2.6                                   | 35        | 10.4                | 20            | 1.2             | FDG2WK207M344MD5 |
| 550 | 5                       | 32         | 22      | 13      | 27.5    | \        | 5.5                     | 325               | 975                | 19.5                                  | 25        | 25.4                | 65            | 0.8             | FDG2JK505G212GL5 |
| 550 | 10                      | 32         | 33      | 18      | 27.5    | \        | 7.5                     | 650               | 1950               | 10.5                                  | 25        | 25.4                | 65            | 0.8             | FDG2JK106G342GL5 |
| 550 | 15                      | 32         | 37      | 22      | 27.5    | \        | 11.5                    | 975               | 2925               | 6.8                                   | 28        | 16.7                | 65            | 0.8             | FDG2JK156G402GL5 |
| 550 | 22                      | 32         | 37      | 22      | 27.5    | \        | 11.5                    | 1430              | 4290               | 4.9                                   | 28        | 23.1                | 65            | 0.8             | FDG2JK226G402GL5 |
| 550 | 30                      | 42         | 44      | 24      | 37.5    | 10.2     | 13.0                    | 1050              | 3150               | 7.2                                   | 30        | 12.3                | 35            | 1.2             | FDG2JK306K324KB5 |
| 550 | 35                      | 42         | 45      | 30      | 37.5    | 20.3     | 13.8                    | 1225              | 3675               | 6.8                                   | 30        | 11.6                | 35            | 1.2             | FDG2JK356K424KD5 |
| 550 | 40                      | 42         | 45      | 30      | 37.5    | 20.3     | 14.8                    | 1400              | 4200               | 6.0                                   | 30        | 11.4                | 35            | 1.2             | FDG2JK406K424KD5 |
| 550 | 50                      | 42         | 50      | 35      | 37.5    | 20.3     | 17.0                    | 1750              | 5250               | 4.8                                   | 30        | 10.8                | 35            | 1.2             | FDG2JK506K474KD5 |
| 550 | 60                      | 42         | 50      | 35      | 37.5    | 20.3     | 18.0                    | 2100              | 6300               | 4.2                                   | 30        | 11.0                | 35            | 1.2             | FDG2JK606K474KD5 |
| 550 | 70                      | 42         | 50      | 35      | 37.5    | 20.3     | 20.5                    | 2450              | 7350               | 3.8                                   | 30        | 11.0                | 35            | 1.2             | FDG2JK706K474KD5 |
| 550 | 110                     | 42         | 60      | 45      | 37.5    | 20.3     | 24.5                    | 3850              | 11550              | 3.6                                   | 30        | 11.0                | 35            | 1.2             | FDG2JK117K524KD5 |
| 550 | 75                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.8                    | 1500              | 4500               | 5.2                                   | 35        | 10.2                | 20            | 1.2             | FDG2JK756M164MD5 |
| 550 | 100                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.5                    | 2000              | 6000               | 4.3                                   | 35        | 10.2                | 20            | 1.2             | FDG2JK107M204MD5 |
| 550 | 110                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0                    | 2200              | 6600               | 4.0                                   | 35        | 9.4                 | 20            | 1.2             | FDG2JK117M204MD5 |
| 550 | 140                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0                    | 2800              | 8400               | 3.5                                   | 35        | 6.3                 | 20            | 1.2             | FDG2JK147M324MD5 |
| 550 | 140                     | 57.5       | 65      | 35      | 52.5    | 20.3     | 26.0                    | 2800              | 8400               | 3.5                                   | 35        | 6.3                 | 20            | 1.2             | FDG2JK147M234MD5 |
| 550 | 170                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 32.0                    | 3400              | 10200              | 2.8                                   | 35        | 5.2                 | 20            | 1.2             | FDG2JK177M344MD5 |
| 550 | 180                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0                    | 3600              | 10800              | 2.6                                   | 35        | 5.2                 | 20            | 1.2             | FDG2JK187M344MD5 |
| 600 | 2                       | 32         | 18      | 9       | 27.5    | \        | 2.9                     | 130               | 390                | 40.0                                  | 25        | 44.6                | 65            | 0.8             | FDG2KK205G152GL5 |
| 600 | 3                       | 32         | 20      | 11      | 27.5    | \        | 4.0                     | 195               | 585                | 28.0                                  | 25        | 33.5                | 65            | 0.8             | FDG2KK305G182GL5 |
| 600 | 4                       | 32         | 20      | 11      | 27.5    | \        | 5.5                     | 260               | 780                | 23.0                                  | 25        | 21.6                | 65            | 0.8             | FDG2KK405G182GL5 |
| 600 | 5                       | 32         | 22      | 13      | 27.5    | \        | 7.0                     | 325               | 975                | 14.5                                  | 25        | 21.1                | 65            | 0.8             | FDG2KK505G212GL5 |
| 600 | 6                       | 32         | 24.5    | 15      | 27.5    | \        | 7.3                     | 390               | 1170               | 13.0                                  | 25        | 21.7                | 65            | 0.8             | FDG2KK605G272GL5 |
| 600 | 7                       | 32         | 24.5    | 15      | 27.5    | \        | 8.5                     | 455               | 1365               | 12.0                                  | 25        | 17.3                | 65            | 0.8             | FDG2KK705G272GL5 |
| 600 | 8                       | 32         | 28      | 14      | 27.5    | \        | 9.5                     | 520               | 1560               | 11.0                                  | 25        | 15.1                | 65            | 0.8             | FDG2KK805G262GL5 |
| 600 | 9                       | 32         | 30      | 16      | 27.5    | \        | 10.5                    | 585               | 1755               | 10.5                                  | 25        | 13.0                | 65            | 0.8             | FDG2KK905G322GL5 |
| 600 | 10                      | 32         | 30      | 16      | 27.5    | \        | 11.0                    | 650               | 1950               | 10.0                                  | 25        | 12.4                | 65            | 0.8             | FDG2KK106G322GL5 |
| 600 | 12                      | 32         | 33      | 18      | 27.5    | \        | 12.0                    | 780               | 2340               | 9.5                                   | 25        | 11.0                | 65            | 0.8             | FDG2KK126G342GL5 |
| 600 | 15                      | 32         | 37      | 22      | 27.5    | \        | 12.0                    | 975               | 2925               | 9.5                                   | 28        | 11.0                | 65            | 0.8             | FDG2KK156G402GL5 |
| 600 | 15                      | 32         | 37      | 22      | 27.5    | 10.2     | 14.5                    | 975               | 2925               | 7.0                                   | 28        | 10.2                | 65            | 1.0             | FDG2KK156G404GB5 |
| 600 | 18                      | 32         | 37      | 22      | 27.5    | \        | 12.5                    | 1170              | 3510               | 9.0                                   | 28        | 10.7                | 65            | 0.8             | FDG2KK186G402GL5 |
| 600 | 18                      | 32         | 37      | 22      | 27.5    | 10.2     | 16.5                    | 1170              | 3510               | 6.0                                   | 28        | 9.2                 | 65            | 1.0             | FDG2KK186G404GB5 |
| 600 | 10                      | 42         | 30      | 17      | 37.5    | \        | 7.0                     | 350               | 1050               | 18.0                                  | 28        | 17.0                | 35            | 1.0             | FDG2KK106K662KL5 |
| 600 | 12                      | 42         | 30      | 17      | 37.5    | \        | 8.0                     | 420               | 1260               | 12.0                                  | 28        | 19.5                | 35            | 1.0             | FDG2KK126K662KL5 |

### Rating and Part Number

| Vdc | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-------------------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 600 | 15                      | 42         | 32      | 19      | 37.5    | \        | 9.5           | 525          | 1575          | 11.0                            | 28  | 15.1        | 35    | 1.0       | FDG2KK156K212KL5 |
| 600 | 20                      | 42         | 40      | 20      | 37.5    | 10.2     | 12.5          | 700          | 2100          | 9.0                             | 30  | 10.7        | 35    | 1.2       | FDG2KK206K244KB5 |
| 600 | 22                      | 42         | 40      | 20      | 37.5    | 10.2     | 13.5          | 770          | 2310          | 8.0                             | 30  | 10.3        | 35    | 1.2       | FDG2KK226K244KB5 |
| 600 | 25                      | 42         | 40      | 20      | 37.5    | 10.2     | 15.5          | 875          | 2625          | 7.0                             | 30  | 8.9         | 35    | 1.2       | FDG2KK256K244KB5 |
| 600 | 30                      | 42         | 44      | 24      | 37.5    | 10.2     | 16.5          | 1050         | 3150          | 6.5                             | 30  | 8.5         | 35    | 1.2       | FDG2KK306K324KB5 |
| 600 | 35                      | 42         | 45      | 30      | 37.5    | 20.3     | 18.5          | 1225         | 3675          | 6.0                             | 30  | 7.3         | 35    | 1.2       | FDG2KK356K424KD5 |
| 600 | 40                      | 42         | 45      | 30      | 37.5    | 20.3     | 20.5          | 1400         | 4200          | 5.0                             | 30  | 7.1         | 35    | 1.2       | FDG2KK406K424KD5 |
| 600 | 45                      | 42         | 50      | 35      | 37.5    | 20.3     | 23.0          | 1575         | 4725          | 4.5                             | 30  | 6.3         | 35    | 1.2       | FDG2KK456K474KD5 |
| 600 | 50                      | 42         | 50      | 35      | 37.5    | 20.3     | 25.0          | 1750         | 5250          | 4.0                             | 30  | 6.0         | 35    | 1.2       | FDG2KK506K474KD5 |
| 600 | 60                      | 42         | 55      | 40      | 37.5    | 20.3     | 27.0          | 2100         | 6300          | 3.8                             | 30  | 5.4         | 35    | 1.2       | FDG2KK606K494KD5 |
| 600 | 70                      | 42         | 55      | 40      | 37.5    | 20.3     | 29.0          | 2450         | 7350          | 3.5                             | 30  | 5.1         | 35    | 1.2       | FDG2KK706K494KD5 |
| 600 | 75                      | 42         | 60      | 45      | 37.5    | 20.3     | 30.0          | 2625         | 7875          | 3.0                             | 30  | 5.6         | 35    | 1.2       | FDG2KK756K524KD5 |
| 600 | 80                      | 42         | 60      | 45      | 37.5    | 20.3     | 32.0          | 2800         | 8400          | 2.8                             | 30  | 5.2         | 35    | 1.2       | FDG2KK806K524KD5 |
| 600 | 85                      | 42         | 60      | 45      | 37.5    | 20.3     | 34.0          | 2975         | 8925          | 2.5                             | 30  | 5.2         | 35    | 1.2       | FDG2KK856K524KD5 |
| 600 | 40                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 13.5          | 800          | 2400          | 8.0                             | 35  | 10.3        | 20    | 1.2       | FDG2KK406M104MB5 |
| 600 | 45                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 14.0          | 900          | 2700          | 7.5                             | 35  | 10.2        | 20    | 1.2       | FDG2KK456M104MB5 |
| 600 | 50                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 15.5          | 1000         | 3000          | 7.0                             | 35  | 8.9         | 20    | 1.2       | FDG2KK506M104MB5 |
| 600 | 55                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 17.0          | 1100         | 3300          | 6.2                             | 35  | 8.4         | 20    | 1.2       | FDG2KK556M164MD5 |
| 600 | 60                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.5          | 1200         | 3600          | 6.0                             | 35  | 7.3         | 20    | 1.2       | FDG2KK606M164MD5 |
| 600 | 65                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0          | 1300         | 3900          | 5.5                             | 35  | 6.8         | 20    | 1.2       | FDG2KK656M204MD5 |
| 600 | 70                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 21.5          | 1400         | 4200          | 5.0                             | 35  | 6.5         | 20    | 1.2       | FDG2KK706M204MD5 |
| 600 | 75                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 23.5          | 1500         | 4500          | 4.5                             | 35  | 6.0         | 20    | 1.2       | FDG2KK756M204MD5 |
| 600 | 80                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.5          | 1600         | 4800          | 4.2                             | 35  | 5.9         | 20    | 1.2       | FDG2KK806M204MD5 |
| 600 | 90                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0          | 1800         | 5400          | 4.0                             | 35  | 5.5         | 20    | 1.2       | FDG2KK906M324MD5 |
| 600 | 100                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 29.0          | 2000         | 6000          | 3.4                             | 35  | 5.2         | 20    | 1.2       | FDG2KK107M324MD5 |
| 600 | 110                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 30.0          | 2200         | 6600          | 3.0                             | 35  | 5.6         | 20    | 1.2       | FDG2KK117M324MD5 |
| 600 | 120                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 32.0          | 2400         | 7200          | 2.8                             | 35  | 5.2         | 20    | 1.2       | FDG2KK127M344MD5 |
| 600 | 130                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0          | 2600         | 7800          | 2.6                             | 35  | 5.3         | 20    | 1.2       | FDG2KK137M344MD5 |
| 600 | 140                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 34.0          | 2800         | 8400          | 2.5                             | 35  | 5.2         | 20    | 1.2       | FDG2KK147M344MD5 |
| 700 | 2                       | 32         | 18      | 9       | 27.5    | \        | 2.9           | 130          | 390           | 40.0                            | 25  | 44.6        | 65    | 0.8       | FDG2MK205G152GL5 |
| 700 | 3                       | 32         | 20      | 11      | 27.5    | \        | 4.0           | 195          | 585           | 28.0                            | 25  | 33.5        | 65    | 0.8       | FDG2MK305G182GL5 |
| 700 | 4                       | 32         | 20      | 11      | 27.5    | \        | 5.5           | 260          | 780           | 23.0                            | 25  | 21.6        | 65    | 0.8       | FDG2MK405G182GL5 |
| 700 | 5                       | 32         | 22      | 13      | 27.5    | \        | 7.0           | 325          | 975           | 14.5                            | 25  | 21.1        | 65    | 0.8       | FDG2MK505G212GL5 |
| 700 | 6                       | 32         | 24.5    | 15      | 27.5    | \        | 7.3           | 390          | 1170          | 13.0                            | 25  | 21.7        | 65    | 0.8       | FDG2MK605G272GL5 |
| 700 | 7                       | 32         | 24.5    | 15      | 27.5    | \        | 8.5           | 455          | 1365          | 12.0                            | 25  | 17.3        | 65    | 0.8       | FDG2MK705G272GL5 |
| 700 | 8                       | 32         | 28      | 14      | 27.5    | \        | 9.5           | 520          | 1560          | 11.0                            | 25  | 15.1        | 65    | 0.8       | FDG2MK805G262GL5 |
| 700 | 9                       | 32         | 30      | 16      | 27.5    | \        | 10.5          | 585          | 1755          | 10.5                            | 25  | 13.0        | 65    | 0.8       | FDG2MK905G322GL5 |
| 700 | 10                      | 32         | 30      | 16      | 27.5    | \        | 11.0          | 650          | 1950          | 10.0                            | 25  | 12.4        | 65    | 0.8       | FDG2MK106G322GL5 |
| 700 | 12                      | 32         | 33      | 18      | 27.5    | \        | 12.0          | 780          | 2340          | 9.5                             | 25  | 11.0        | 65    | 0.8       | FDG2MK126G342GL5 |
| 700 | 15                      | 32         | 37      | 22      | 27.5    | \        | 12.0          | 975          | 2925          | 9.5                             | 28  | 11.0        | 65    | 0.8       | FDG2MK156G402GL5 |
| 700 | 15                      | 32         | 37      | 22      | 27.5    | 10.2     | 14.5          | 975          | 2925          | 7.0                             | 28  | 10.2        | 65    | 1.0       | FDG2MK156G404GB5 |
| 700 | 18                      | 32         | 37      | 22      | 27.5    | \        | 12.5          | 1170         | 3510          | 9.0                             | 28  | 10.7        | 65    | 0.8       | FDG2MK186G402GL5 |
| 700 | 18                      | 32         | 37      | 22      | 27.5    | 10.2     | 16.5          | 1170         | 3510          | 6.0                             | 28  | 9.2         | 65    | 1.0       | FDG2MK186G404GB5 |
| 700 | 10                      | 42         | 30      | 17      | 37.5    | \        | 7.0           | 350          | 1050          | 18.0                            | 28  | 17.0        | 35    | 1.0       | FDG2MK106K662KL5 |
| 700 | 12                      | 42         | 30      | 17      | 37.5    | \        | 8.0           | 420          | 1260          | 12.0                            | 28  | 19.5        | 35    | 1.0       | FDG2MK126K662KL5 |
| 700 | 15                      | 42         | 32      | 19      | 37.5    | \        | 9.5           | 525          | 1575          | 11.0                            | 28  | 15.1        | 35    | 1.0       | FDG2MK156K212KL5 |
| 700 | 20                      | 42         | 40      | 20      | 37.5    | 10.2     | 12.5          | 700          | 2100          | 9.0                             | 30  | 10.7        | 35    | 1.2       | FDG2MK206K244KB5 |
| 700 | 22                      | 42         | 40      | 20      | 37.5    | 10.2     | 13.5          | 770          | 2310          | 8.0                             | 30  | 10.3        | 35    | 1.2       | FDG2MK226K244KB5 |
| 700 | 25                      | 42         | 40      | 20      | 37.5    | 10.2     | 15.5          | 875          | 2625          | 7.0                             | 30  | 8.9         | 35    | 1.2       | FDG2MK256K244KB5 |
| 700 | 30                      | 42         | 44      | 24      | 37.5    | 10.2     | 16.5          | 1050         | 3150          | 6.5                             | 30  | 8.5         | 35    | 1.2       | FDG2MK306K324KB5 |
| 700 | 35                      | 42         | 45      | 30      | 37.5    | 20.3     | 18.5          | 1225         | 3675          | 6.0                             | 30  | 7.3         | 35    | 1.2       | FDG2MK356K424KD5 |
| 700 | 40                      | 42         | 45      | 30      | 37.5    | 20.3     | 20.5          | 1400         | 4200          | 5.0                             | 30  | 7.1         | 35    | 1.2       | FDG2MK406K424KD5 |
| 700 | 45                      | 42         | 50      | 35      | 37.5    | 20.3     | 23.0          | 1575         | 4725          | 4.5                             | 30  | 6.3         | 35    | 1.2       | FDG2MK456K474KD5 |
| 700 | 50                      | 42         | 50      | 35      | 37.5    | 20.3     | 25.0          | 1750         | 5250          | 4.0                             | 30  | 6.0         | 35    | 1.2       | FDG2MK506K474KD5 |
| 700 | 60                      | 42         | 55      | 40      | 37.5    | 20.3     | 27.0          | 2100         | 6300          | 3.8                             | 30  | 5.4         | 35    | 1.2       | FDG2MK606K494KD5 |
| 700 | 70                      | 42         | 55      | 40      | 37.5    | 20.3     | 29.0          | 2450         | 7350          | 3.5                             | 30  | 5.1         | 35    | 1.2       | FDG2MK706K494KD5 |

### Rating and Part Number

| Vdc | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-------------------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 700 | 75                      | 42         | 60      | 45      | 37.5    | 20.3     | 30.0          | 2625         | 7875          | 3.0                             | 30  | 5.6         | 35    | 1.2       | FDG2MK756K524KD5 |
| 700 | 80                      | 42         | 60      | 45      | 37.5    | 20.3     | 32.0          | 2800         | 8400          | 2.8                             | 30  | 5.2         | 35    | 1.2       | FDG2MK806K524KD5 |
| 700 | 85                      | 42         | 60      | 45      | 37.5    | 20.3     | 34.0          | 2975         | 8925          | 2.5                             | 30  | 5.2         | 35    | 1.2       | FDG2MK856K524KD5 |
| 700 | 40                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 13.5          | 800          | 2400          | 8.0                             | 35  | 10.3        | 20    | 1.2       | FDG2MK406M104MB5 |
| 700 | 45                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 14.0          | 900          | 2700          | 7.5                             | 35  | 10.2        | 20    | 1.2       | FDG2MK456M104MB5 |
| 700 | 50                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 15.5          | 1000         | 3000          | 7.0                             | 35  | 8.9         | 20    | 1.2       | FDG2MK506M104MB5 |
| 700 | 55                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 17.0          | 1100         | 3300          | 6.2                             | 35  | 8.4         | 20    | 1.2       | FDG2MK556M164MD5 |
| 700 | 60                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.5          | 1200         | 3600          | 6.0                             | 35  | 7.3         | 20    | 1.2       | FDG2MK606M164MD5 |
| 700 | 65                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0          | 1300         | 3900          | 5.5                             | 35  | 6.8         | 20    | 1.2       | FDG2MK656M204MD5 |
| 700 | 70                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 21.5          | 1400         | 4200          | 5.0                             | 35  | 6.5         | 20    | 1.2       | FDG2MK706M204MD5 |
| 700 | 75                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 23.5          | 1500         | 4500          | 4.5                             | 35  | 6.0         | 20    | 1.2       | FDG2MK756M204MD5 |
| 700 | 80                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.5          | 1600         | 4800          | 4.2                             | 35  | 5.9         | 20    | 1.2       | FDG2MK806M204MD5 |
| 700 | 90                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0          | 1800         | 5400          | 4.0                             | 35  | 5.5         | 20    | 1.2       | FDG2MK906M324MD5 |
| 700 | 100                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 29.0          | 2000         | 6000          | 3.4                             | 35  | 5.2         | 20    | 1.2       | FDG2MK107M324MD5 |
| 700 | 110                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 30.0          | 2200         | 6600          | 3.0                             | 35  | 5.6         | 20    | 1.2       | FDG2MK117M324MD5 |
| 700 | 120                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 32.0          | 2400         | 7200          | 2.8                             | 35  | 5.2         | 20    | 1.2       | FDG2MK127M344MD5 |
| 700 | 130                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0          | 2600         | 7800          | 2.6                             | 35  | 5.3         | 20    | 1.2       | FDG2MK137M344MD5 |
| 700 | 140                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 34.0          | 2800         | 8400          | 2.5                             | 35  | 5.2         | 20    | 1.2       | FDG2MK147M344MD5 |
| 800 | 2                       | 32         | 18      | 9       | 27.5    | \        | 2.9           | 130          | 390           | 40.0                            | 25  | 44.6        | 65    | 0.8       | FDG2NK205G152GL5 |
| 800 | 3                       | 32         | 20      | 11      | 27.5    | \        | 4.5           | 195          | 585           | 26.0                            | 25  | 28.5        | 65    | 0.8       | FDG2NK305G182GL5 |
| 800 | 4                       | 32         | 24.5    | 13      | 27.5    | \        | 5.8           | 260          | 780           | 22.0                            | 25  | 20.3        | 65    | 0.8       | FDG2NK405G222GL5 |
| 800 | 5                       | 32         | 24.5    | 15      | 27.5    | \        | 7.5           | 325          | 975           | 14.0                            | 25  | 19.0        | 65    | 0.8       | FDG2NK505G272GL5 |
| 800 | 6                       | 32         | 30      | 16      | 27.5    | \        | 8.5           | 390          | 1170          | 12.0                            | 25  | 17.3        | 65    | 0.8       | FDG2NK605G322GL5 |
| 800 | 7                       | 32         | 30      | 16      | 27.5    | \        | 9.5           | 455          | 1365          | 11.0                            | 25  | 15.1        | 65    | 0.8       | FDG2NK705G322GL5 |
| 800 | 8                       | 32         | 33      | 18      | 27.5    | \        | 10.5          | 520          | 1560          | 10.5                            | 25  | 13.0        | 65    | 0.8       | FDG2NK805G342GL5 |
| 800 | 9                       | 32         | 33      | 18      | 27.5    | \        | 11.5          | 585          | 1755          | 10.2                            | 25  | 11.1        | 65    | 0.8       | FDG2NK905G342GL5 |
| 800 | 10                      | 32         | 37      | 22      | 27.5    | \        | 12.0          | 650          | 1950          | 9.5                             | 25  | 11.0        | 65    | 0.8       | FDG2NK106G402GL5 |
| 800 | 10                      | 32         | 37      | 22      | 27.5    | 10.2     | 14.0          | 650          | 1950          | 8.5                             | 25  | 9.0         | 65    | 1.0       | FDG2NK106G404GB5 |
| 800 | 12                      | 32         | 37      | 22      | 27.5    | \        | 12.0          | 780          | 2340          | 9.5                             | 25  | 11.0        | 65    | 0.8       | FDG2NK126G402GL5 |
| 800 | 12                      | 32         | 37      | 22      | 27.5    | 10.2     | 15.0          | 780          | 2340          | 8.0                             | 25  | 8.3         | 65    | 1.0       | FDG2NK126G404GB5 |
| 800 | 14                      | 32         | 37      | 22      | 27.5    | \        | 12.0          | 910          | 2730          | 9.5                             | 25  | 11.0        | 65    | 0.8       | FDG2NK146G402GL5 |
| 800 | 14                      | 32         | 37      | 22      | 27.5    | 10.2     | 16.0          | 910          | 2730          | 7.5                             | 25  | 7.8         | 65    | 1.0       | FDG2NK146G404GB5 |
| 800 | 8                       | 42         | 30      | 17      | 37.5    | \        | 5.5           | 280          | 840           | 22.5                            | 28  | 22.0        | 35    | 1.0       | FDG2NK805K662KL5 |
| 800 | 9                       | 42         | 30      | 17      | 37.5    | \        | 6.0           | 315          | 945           | 21.5                            | 28  | 19.4        | 35    | 1.0       | FDG2NK905K662KL5 |
| 800 | 10                      | 42         | 32      | 19      | 37.5    | \        | 7.0           | 350          | 1050          | 18.0                            | 28  | 17.0        | 35    | 1.0       | FDG2NK106K212KL5 |
| 800 | 12                      | 42         | 32      | 19      | 37.5    | \        | 8.0           | 420          | 1260          | 12.0                            | 28  | 19.5        | 35    | 1.0       | FDG2NK126K212KL5 |
| 800 | 14                      | 42         | 32      | 19      | 37.5    | \        | 9.5           | 490          | 1470          | 11.0                            | 28  | 15.1        | 35    | 1.0       | FDG2NK146K212KL5 |
| 800 | 15                      | 42         | 40      | 20      | 37.5    | 10.2     | 12.5          | 525          | 1575          | 9.0                             | 30  | 10.7        | 35    | 1.2       | FDG2NK156K244KB5 |
| 800 | 20                      | 42         | 44      | 24      | 37.5    | 10.2     | 13.5          | 700          | 2100          | 8.0                             | 30  | 10.3        | 35    | 1.2       | FDG2NK206K324KB5 |
| 800 | 25                      | 42         | 44      | 24      | 37.5    | 10.2     | 16.5          | 875          | 2625          | 6.5                             | 30  | 8.5         | 35    | 1.2       | FDG2NK256K324KB5 |
| 800 | 30                      | 42         | 45      | 30      | 37.5    | 20.3     | 20.0          | 1050         | 3150          | 5.8                             | 30  | 6.5         | 35    | 1.2       | FDG2NK306K424KD5 |
| 800 | 35                      | 42         | 50      | 35      | 37.5    | 20.3     | 22.0          | 1225         | 3675          | 5.5                             | 30  | 5.6         | 35    | 1.2       | FDG2NK356K474KD5 |
| 800 | 40                      | 42         | 50      | 35      | 37.5    | 20.3     | 25.0          | 1400         | 4200          | 4.8                             | 30  | 5.0         | 35    | 1.2       | FDG2NK406K474KD5 |
| 800 | 45                      | 42         | 55      | 40      | 37.5    | 20.3     | 28.0          | 1575         | 4725          | 4.0                             | 30  | 4.8         | 35    | 1.2       | FDG2NK456K494KD5 |
| 800 | 50                      | 42         | 55      | 40      | 37.5    | 20.3     | 31.0          | 1750         | 5250          | 3.6                             | 30  | 4.3         | 35    | 1.2       | FDG2NK506K494KD5 |
| 800 | 55                      | 42         | 60      | 45      | 37.5    | 20.3     | 32.5          | 1925         | 5775          | 3.4                             | 30  | 4.2         | 35    | 1.2       | FDG2NK556K524KD5 |
| 800 | 60                      | 42         | 60      | 45      | 37.5    | 20.3     | 34.0          | 2100         | 6300          | 3.2                             | 30  | 4.1         | 35    | 1.2       | FDG2NK606K524KD5 |
| 800 | 65                      | 42         | 60      | 45      | 37.5    | 20.3     | 35.0          | 2275         | 6825          | 2.8                             | 30  | 4.4         | 35    | 1.2       | FDG2NK656K524KD5 |
| 800 | 25                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 8.5           | 500          | 1500          | 12.0                            | 35  | 17.3        | 20    | 1.2       | FDG2NK256M104MB5 |
| 800 | 30                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 10.0          | 600          | 1800          | 10.5                            | 35  | 14.3        | 20    | 1.2       | FDG2NK306M104MB5 |
| 800 | 35                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 12.0          | 700          | 2100          | 9.5                             | 35  | 11.0        | 20    | 1.2       | FDG2NK356M104MB5 |
| 800 | 40                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 14.0          | 800          | 2400          | 8.5                             | 35  | 9.0         | 20    | 1.2       | FDG2NK406M164MD5 |
| 800 | 45                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 15.5          | 900          | 2700          | 7.0                             | 35  | 8.9         | 20    | 1.2       | FDG2NK456M164MD5 |
| 800 | 50                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 17.0          | 1000         | 3000          | 5.8                             | 35  | 8.9         | 20    | 1.2       | FDG2NK506M204MD5 |
| 800 | 55                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 19.0          | 1100         | 3300          | 5.5                             | 35  | 7.6         | 20    | 1.2       | FDG2NK556M204MD5 |
| 800 | 60                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 21.0          | 1200         | 3600          | 4.8                             | 35  | 7.1         | 20    | 1.2       | FDG2NK606M204MD5 |

### Rating and Part Number

| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|------|-------------------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|      |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 800  | 65                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 22.5          | 1300         | 3900          | 4.6                             | 35  | 6.4         | 20    | 1.2       | FDG2NK656M324MD5 |
| 800  | 70                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 24.0          | 1400         | 4200          | 4.5                             | 35  | 5.8         | 20    | 1.2       | FDG2NK706M324MD5 |
| 800  | 75                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 25.5          | 1500         | 4500          | 4.3                             | 35  | 5.4         | 20    | 1.2       | FDG2NK756M324MD5 |
| 800  | 80                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0          | 1600         | 4800          | 4.2                             | 35  | 5.3         | 20    | 1.2       | FDG2NK806M324MD5 |
| 800  | 90                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 27.5          | 1800         | 5400          | 4.0                             | 35  | 5.0         | 20    | 1.2       | FDG2NK906M324MD5 |
| 800  | 100                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 31.5          | 2000         | 6000          | 3.2                             | 35  | 4.7         | 20    | 1.2       | FDG2NK107M344MD5 |
| 800  | 110                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 34.0          | 2200         | 6600          | 3.0                             | 35  | 4.3         | 20    | 1.2       | FDG2NK117M344MD5 |
| 900  | 1                       | 32         | 18      | 9       | 27.5    | \        | 2.0           | 70           | 210           | 65.0                            | 25  | 57.7        | 70    | 0.8       | FDG2QK105G152GL5 |
| 900  | 2                       | 32         | 20      | 11      | 27.5    | \        | 3.2           | 140          | 420           | 38.0                            | 25  | 38.5        | 70    | 0.8       | FDG2QK205G182GL5 |
| 900  | 3                       | 32         | 22      | 13      | 27.5    | \        | 4.8           | 210          | 630           | 30.0                            | 25  | 21.7        | 70    | 0.8       | FDG2QK305G212GL5 |
| 900  | 4                       | 32         | 24.5    | 15      | 27.5    | \        | 6.0           | 280          | 840           | 20.5                            | 25  | 20.3        | 70    | 0.8       | FDG2QK405G272GL5 |
| 900  | 5                       | 32         | 30      | 16      | 27.5    | \        | 7.5           | 350          | 1050          | 12.0                            | 25  | 22.2        | 70    | 0.8       | FDG2QK505G322GL5 |
| 900  | 6                       | 32         | 33      | 18      | 27.5    | \        | 7.8           | 420          | 1260          | 11.5                            | 25  | 21.4        | 70    | 0.8       | FDG2QK605G342GL5 |
| 900  | 7                       | 32         | 33      | 18      | 27.5    | \        | 10.5          | 490          | 1470          | 10.2                            | 25  | 13.3        | 70    | 0.8       | FDG2QK705G342GL5 |
| 900  | 8                       | 32         | 37      | 22      | 27.5    | \        | 11.5          | 560          | 1680          | 9.5                             | 25  | 11.9        | 70    | 0.8       | FDG2QK805G402GL5 |
| 900  | 8                       | 32         | 37      | 22      | 27.5    | 10.2     | 12.5          | 560          | 1680          | 9.0                             | 25  | 10.7        | 70    | 1.0       | FDG2QK805G404GB5 |
| 900  | 9                       | 32         | 37      | 22      | 27.5    | \        | 11.8          | 630          | 1890          | 9.7                             | 25  | 11.1        | 70    | 0.8       | FDG2QK905G402GL5 |
| 900  | 9                       | 32         | 37      | 22      | 27.5    | 10.2     | 14.0          | 630          | 1890          | 7.8                             | 25  | 9.8         | 70    | 1.0       | FDG2QK905G404GB5 |
| 900  | 10                      | 32         | 37      | 22      | 27.5    | \        | 12.0          | 700          | 2100          | 9.5                             | 25  | 11.0        | 70    | 0.8       | FDG2QK106G402GL5 |
| 900  | 10                      | 32         | 37      | 22      | 27.5    | 10.2     | 15.5          | 700          | 2100          | 7.2                             | 25  | 8.7         | 70    | 1.0       | FDG2QK106G404GB5 |
| 900  | 5                       | 42         | 30      | 17      | 37.5    | \        | 3.8           | 175          | 525           | 28.0                            | 28  | 37.1        | 35    | 1.0       | FDG2QK505K662KL5 |
| 900  | 6                       | 42         | 30      | 17      | 37.5    | \        | 4.5           | 210          | 630           | 25.0                            | 28  | 29.6        | 35    | 1.0       | FDG2QK605K662KL5 |
| 900  | 7                       | 42         | 30      | 17      | 37.5    | \        | 5.0           | 245          | 735           | 22.0                            | 28  | 27.3        | 35    | 1.0       | FDG2QK705K662KL5 |
| 900  | 8                       | 42         | 32      | 19      | 37.5    | \        | 6.0           | 280          | 840           | 19.5                            | 28  | 21.4        | 35    | 1.0       | FDG2QK805K212KL5 |
| 900  | 10                      | 42         | 40      | 20      | 37.5    | 10.2     | 7.5           | 350          | 1050          | 13.0                            | 30  | 20.5        | 35    | 1.2       | FDG2QK106K244KB5 |
| 900  | 12                      | 42         | 37      | 22      | 37.5    | 10.2     | 9.0           | 420          | 1260          | 11.5                            | 30  | 16.1        | 35    | 1.2       | FDG2QK126K274KB5 |
| 900  | 15                      | 42         | 44      | 24      | 37.5    | 10.2     | 10.5          | 525          | 1575          | 10.5                            | 30  | 13.0        | 35    | 1.2       | FDG2QK156K324KB5 |
| 900  | 18                      | 42         | 44      | 24      | 37.5    | 10.2     | 13.0          | 630          | 1890          | 8.8                             | 30  | 10.1        | 35    | 1.2       | FDG2QK186K324KB5 |
| 900  | 20                      | 42         | 44      | 24      | 37.5    | 10.2     | 14.5          | 700          | 2100          | 7.5                             | 30  | 9.5         | 35    | 1.2       | FDG2QK206K324KB5 |
| 900  | 25                      | 42         | 45      | 30      | 37.5    | 20.3     | 17.5          | 875          | 2625          | 6.2                             | 30  | 7.9         | 35    | 1.2       | FDG2QK256K424KD5 |
| 900  | 30                      | 42         | 50      | 35      | 37.5    | 20.3     | 21.5          | 1050         | 3150          | 5.0                             | 30  | 6.5         | 35    | 1.2       | FDG2QK306K474KD5 |
| 900  | 35                      | 42         | 55      | 40      | 37.5    | 20.3     | 23.0          | 1225         | 3675          | 4.6                             | 30  | 6.2         | 35    | 1.2       | FDG2QK356K494KD5 |
| 900  | 40                      | 42         | 55      | 40      | 37.5    | 20.3     | 26.5          | 1400         | 4200          | 3.9                             | 30  | 5.5         | 35    | 1.2       | FDG2QK406K494KD5 |
| 900  | 45                      | 42         | 60      | 45      | 37.5    | 20.3     | 30.0          | 1575         | 4725          | 3.4                             | 30  | 4.9         | 35    | 1.2       | FDG2QK456K524KD5 |
| 900  | 50                      | 42         | 60      | 45      | 37.5    | 20.3     | 33.5          | 1750         | 5250          | 3.0                             | 30  | 4.5         | 35    | 1.2       | FDG2QK506K524KD5 |
| 900  | 15                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 5.5           | 300          | 900           | 22.0                            | 35  | 22.5        | 20    | 1.2       | FDG2QK156M104MB5 |
| 900  | 20                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 7.5           | 400          | 1200          | 13.5                            | 35  | 19.8        | 20    | 1.2       | FDG2QK206M104MB5 |
| 900  | 25                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 9.0           | 500          | 1500          | 11.5                            | 35  | 16.1        | 20    | 1.2       | FDG2QK256M104MB5 |
| 900  | 30                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 11.0          | 600          | 1800          | 10.0                            | 35  | 12.4        | 20    | 1.2       | FDG2QK306M164MD5 |
| 900  | 35                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5          | 700          | 2100          | 9.0                             | 35  | 10.7        | 20    | 1.2       | FDG2QK356M164MD5 |
| 900  | 40                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.5          | 800          | 2400          | 7.5                             | 35  | 9.5         | 20    | 1.2       | FDG2QK406M204MD5 |
| 900  | 45                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 16.0          | 900          | 2700          | 6.8                             | 35  | 8.6         | 20    | 1.2       | FDG2QK456M204MD5 |
| 900  | 50                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.0          | 1000         | 3000          | 6.4                             | 35  | 7.2         | 20    | 1.2       | FDG2QK506M204MD5 |
| 900  | 55                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 20.0          | 1100         | 3300          | 5.6                             | 35  | 6.7         | 20    | 1.2       | FDG2QK556M324MD5 |
| 900  | 60                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 21.5          | 1200         | 3600          | 4.8                             | 35  | 6.8         | 20    | 1.2       | FDG2QK606M324MD5 |
| 900  | 65                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 23.0          | 1300         | 3900          | 4.5                             | 35  | 6.3         | 20    | 1.2       | FDG2QK656M324MD5 |
| 900  | 70                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 25.0          | 1400         | 4200          | 4.0                             | 35  | 6.0         | 20    | 1.2       | FDG2QK706M344MD5 |
| 900  | 75                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 25.5          | 1500         | 4500          | 3.9                             | 35  | 5.9         | 20    | 1.2       | FDG2QK756M344MD5 |
| 900  | 80                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 26.5          | 1600         | 4800          | 3.8                             | 35  | 5.6         | 20    | 1.2       | FDG2QK806M344MD5 |
| 900  | 85                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 28.5          | 1700         | 5100          | 3.6                             | 35  | 5.1         | 20    | 1.2       | FDG2QK856M344MD5 |
| 1000 | 1                       | 32         | 18      | 9       | 27.5    | \        | 2.0           | 75           | 225           | 65.0                            | 25  | 57.7        | 75    | 0.8       | FDG3KK105G152GL5 |
| 1000 | 2                       | 32         | 22      | 13      | 27.5    | \        | 3.5           | 150          | 450           | 38.0                            | 25  | 32.2        | 75    | 0.8       | FDG3KK205G212GL5 |
| 1000 | 3                       | 32         | 24.5    | 15      | 27.5    | \        | 5.0           | 225          | 675           | 22.0                            | 25  | 27.3        | 75    | 0.8       | FDG3KK305G272GL5 |
| 1000 | 4                       | 32         | 30      | 16      | 27.5    | \        | 7.0           | 300          | 900           | 16.5                            | 25  | 18.6        | 75    | 0.8       | FDG3KK405G322GL5 |
| 1000 | 5                       | 32         | 33      | 18      | 27.5    | \        | 8.5           | 375          | 1125          | 12.5                            | 25  | 16.6        | 75    | 0.8       | FDG3KK505G342GL5 |
| 1000 | 6                       | 32         | 33      | 18      | 27.5    | \        | 9.0           | 450          | 1350          | 11.5                            | 25  | 16.1        | 75    | 0.8       | FDG3KK605G342GL5 |

# Metalized Polypropylene Film DC-Link Capacitors

## FDG Series - 450 ~ 1200VDC, THB Grade IIIB

### Rating and Part Number

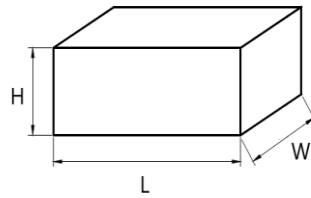
| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |      |      |      |       | Irms 10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub> 10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|------|-------------------------|------------|------|------|------|-------|------------|--------------|---------------|------------------------------|-----|-------------|-------|-----------|------------------|
|      |                         | W mm       | H mm | T mm | P mm | P1 mm |            |              |               |                              |     |             |       |           |                  |
| 1000 | 7                       | 32         | 37   | 22   | 27.5 | \     | 9.5        | 525          | 1575          | 11.0                         | 25  | 15.1        | 75    | 0.8       | FDG3KK705G402GL5 |
| 1000 | 7                       | 32         | 37   | 22   | 27.5 | 10.2  | 11.5       | 525          | 1575          | 9.8                          | 25  | 11.6        | 75    | 1.0       | FDG3KK705G404GB5 |
| 1000 | 8                       | 32         | 37   | 22   | 27.5 | \     | 10.5       | 600          | 1800          | 10.5                         | 25  | 13.0        | 75    | 0.8       | FDG3KK805G402GL5 |
| 1000 | 8                       | 32         | 37   | 22   | 27.5 | 10.2  | 13.0       | 600          | 1800          | 8.8                          | 25  | 10.1        | 75    | 1.0       | FDG3KK805G404GB5 |
| 1000 | 5                       | 42         | 30   | 17   | 37.5 | \     | 3.8        | 175          | 525           | 28.0                         | 28  | 37.1        | 35    | 1.0       | FDG3KK505K662KL5 |
| 1000 | 6                       | 42         | 30   | 17   | 37.5 | \     | 4.5        | 210          | 630           | 25.0                         | 28  | 29.6        | 35    | 1.0       | FDG3KK605K662KL5 |
| 1000 | 7                       | 42         | 30   | 17   | 37.5 | \     | 5.0        | 245          | 735           | 22.0                         | 28  | 27.3        | 35    | 1.0       | FDG3KK705K662KL5 |
| 1000 | 8                       | 42         | 32   | 19   | 37.5 | \     | 6.0        | 280          | 840           | 19.5                         | 28  | 21.4        | 35    | 1.0       | FDG3KK805K12KL5  |
| 1000 | 10                      | 42         | 40   | 20   | 37.5 | 10.2  | 7.5        | 350          | 1050          | 13.0                         | 30  | 20.5        | 35    | 1.2       | FDG3KK106K244KB5 |
| 1000 | 12                      | 42         | 37   | 22   | 37.5 | 10.2  | 9.0        | 420          | 1260          | 11.5                         | 30  | 16.1        | 35    | 1.2       | FDG3KK126K274KB5 |
| 1000 | 15                      | 42         | 44   | 24   | 37.5 | 10.2  | 11.5       | 525          | 1575          | 10.0                         | 30  | 11.3        | 35    | 1.2       | FDG3KK156K324KB5 |
| 1000 | 18                      | 42         | 45   | 30   | 37.5 | 20.3  | 14.0       | 630          | 1890          | 7.8                          | 30  | 9.8         | 35    | 1.2       | FDG3KK186K424KD5 |
| 1000 | 20                      | 42         | 45   | 30   | 37.5 | 20.3  | 15.5       | 700          | 2100          | 7.0                          | 30  | 8.9         | 35    | 1.2       | FDG3KK206K424KD5 |
| 1000 | 25                      | 42         | 50   | 35   | 37.5 | 20.3  | 19.5       | 875          | 2625          | 5.5                          | 30  | 7.2         | 35    | 1.2       | FDG3KK256K474KD5 |
| 1000 | 30                      | 42         | 55   | 40   | 37.5 | 20.3  | 23.0       | 1050         | 3150          | 4.6                          | 30  | 6.2         | 35    | 1.2       | FDG3KK306K494KD5 |
| 1000 | 35                      | 42         | 55   | 40   | 37.5 | 20.3  | 25.0       | 1225         | 3675          | 4.0                          | 30  | 6.0         | 35    | 1.2       | FDG3KK356K494KD5 |
| 1000 | 40                      | 42         | 60   | 45   | 37.5 | 20.3  | 28.5       | 1400         | 4200          | 3.6                          | 30  | 5.1         | 35    | 1.2       | FDG3KK406K524KD5 |
| 1000 | 15                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 5.8        | 300          | 900           | 19.8                         | 35  | 22.5        | 20    | 1.2       | FDG3KK156M104MB5 |
| 1000 | 20                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 7.5        | 400          | 1200          | 13.5                         | 35  | 19.8        | 20    | 1.2       | FDG3KK206M104MB5 |
| 1000 | 25                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 9.5        | 500          | 1500          | 11.0                         | 35  | 15.1        | 20    | 1.2       | FDG3KK256M104MB5 |
| 1000 | 30                      | 57.5       | 45   | 30   | 52.5 | 20.3  | 11.5       | 600          | 1800          | 9.8                          | 35  | 11.6        | 20    | 1.2       | FDG3KK306M164MD5 |
| 1000 | 35                      | 57.5       | 45   | 30   | 52.5 | 20.3  | 13.5       | 700          | 2100          | 8.0                          | 35  | 10.3        | 20    | 1.2       | FDG3KK356M164MD5 |
| 1000 | 40                      | 57.5       | 50   | 35   | 52.5 | 20.3  | 15.5       | 800          | 2400          | 7.0                          | 35  | 8.9         | 20    | 1.2       | FDG3KK406M204MD5 |
| 1000 | 45                      | 57.5       | 55   | 45   | 52.5 | 20.3  | 17.5       | 900          | 2700          | 6.2                          | 35  | 7.9         | 20    | 1.2       | FDG3KK456M324MD5 |
| 1000 | 50                      | 57.5       | 55   | 45   | 52.5 | 20.3  | 19.5       | 1000         | 3000          | 5.8                          | 35  | 6.8         | 20    | 1.2       | FDG3KK506M324MD5 |
| 1000 | 55                      | 57.5       | 55   | 45   | 52.5 | 20.3  | 21.0       | 1100         | 3300          | 5.0                          | 35  | 6.8         | 20    | 1.2       | FDG3KK556M324MD5 |
| 1000 | 60                      | 57.5       | 65   | 45   | 52.5 | 20.3  | 23.0       | 1200         | 3600          | 4.6                          | 35  | 6.2         | 20    | 1.2       | FDG3KK606M344MD5 |
| 1000 | 65                      | 57.5       | 65   | 45   | 52.5 | 20.3  | 25.0       | 1300         | 3900          | 4.2                          | 35  | 5.7         | 20    | 1.2       | FDG3KK656M344MD5 |
| 1000 | 70                      | 57.5       | 65   | 45   | 52.5 | 20.3  | 27.0       | 1400         | 4200          | 3.8                          | 35  | 5.4         | 20    | 1.2       | FDG3KK706M344MD5 |
| 1100 | 1                       | 32         | 20   | 11   | 27.5 | \     | 2.2        | 80           | 240           | 65.0                         | 25  | 47.7        | 80    | 0.8       | FDG3MK105G182GL5 |
| 1100 | 1.5                     | 32         | 22   | 13   | 27.5 | \     | 2.5        | 120          | 360           | 46.0                         | 25  | 52.2        | 80    | 0.8       | FDG3MK155G212GL5 |
| 1100 | 2                       | 32         | 24.5 | 13   | 27.5 | \     | 4.8        | 160          | 480           | 24.5                         | 25  | 26.6        | 80    | 0.8       | FDG3MK205G222GL5 |
| 1100 | 3                       | 32         | 30   | 16   | 27.5 | \     | 6.5        | 240          | 720           | 18.5                         | 25  | 19.2        | 80    | 0.8       | FDG3MK305G322GL5 |
| 1100 | 4                       | 32         | 33   | 18   | 27.5 | \     | 8.5        | 320          | 960           | 12.5                         | 25  | 16.6        | 80    | 0.8       | FDG3MK405G342GL5 |
| 1100 | 5                       | 32         | 37   | 22   | 27.5 | \     | 9.8        | 400          | 1200          | 10.8                         | 25  | 14.5        | 80    | 0.8       | FDG3MK505G402GL5 |
| 1100 | 5                       | 32         | 37   | 22   | 27.5 | 10.2  | 10.5       | 400          | 1200          | 10.5                         | 25  | 13.0        | 80    | 1.0       | FDG3MK505G404GB5 |
| 1100 | 6                       | 32         | 37   | 22   | 27.5 | \     | 10.5       | 480          | 1440          | 10.5                         | 25  | 13.0        | 80    | 0.8       | FDG3MK605G402GL5 |
| 1100 | 6                       | 32         | 37   | 22   | 27.5 | 10.2  | 13.0       | 480          | 1440          | 8.8                          | 25  | 10.1        | 80    | 1.0       | FDG3MK605G404GB5 |
| 1100 | 3                       | 42         | 30   | 17   | 37.5 | \     | 2.5        | 120          | 360           | 46.0                         | 28  | 52.2        | 40    | 1.0       | FDG3MK305K662KL5 |
| 1100 | 4                       | 42         | 30   | 17   | 37.5 | \     | 3.5        | 160          | 480           | 32.5                         | 28  | 37.7        | 40    | 1.0       | FDG3MK405K662KL5 |
| 1100 | 4.7                     | 42         | 32   | 19   | 37.5 | \     | 4.0        | 188          | 564           | 28.0                         | 28  | 33.5        | 40    | 1.0       | FDG3MK475K212KL5 |
| 1100 | 5                       | 42         | 32   | 19   | 37.5 | \     | 4.2        | 200          | 600           | 26.0                         | 28  | 32.7        | 40    | 1.0       | FDG3MK505K212KL5 |
| 1100 | 6                       | 42         | 32   | 19   | 37.5 | \     | 5.0        | 240          | 720           | 23.5                         | 28  | 25.5        | 40    | 1.0       | FDG3MK605K212KL5 |
| 1100 | 7                       | 42         | 40   | 20   | 37.5 | 10.2  | 6.0        | 280          | 840           | 18.5                         | 30  | 22.5        | 40    | 1.2       | FDG3MK705K244KB5 |
| 1100 | 8                       | 42         | 37   | 22   | 37.5 | 10.2  | 6.5        | 320          | 960           | 16.5                         | 30  | 21.5        | 40    | 1.2       | FDG3MK805K274KB5 |
| 1100 | 9                       | 42         | 37   | 22   | 37.5 | 10.2  | 7.5        | 360          | 1080          | 13.0                         | 30  | 20.5        | 40    | 1.2       | FDG3MK905K274KB5 |
| 1100 | 10                      | 42         | 44   | 24   | 37.5 | 10.2  | 8.5        | 400          | 1200          | 12.0                         | 30  | 17.3        | 40    | 1.2       | FDG3MK106K324KB5 |
| 1100 | 12                      | 42         | 44   | 24   | 37.5 | 10.2  | 10.0       | 480          | 1440          | 10.8                         | 30  | 13.9        | 40    | 1.2       | FDG3MK126K324KB5 |
| 1100 | 14                      | 42         | 45   | 30   | 37.5 | 20.3  | 12.0       | 560          | 1680          | 9.5                          | 30  | 11.0        | 40    | 1.2       | FDG3MK146K424KD5 |
| 1100 | 15                      | 42         | 45   | 30   | 37.5 | 20.3  | 13.0       | 600          | 1800          | 8.5                          | 30  | 10.4        | 40    | 1.2       | FDG3MK156K424KD5 |
| 1100 | 18                      | 42         | 50   | 35   | 37.5 | 20.3  | 15.0       | 720          | 2160          | 7.0                          | 30  | 9.5         | 40    | 1.2       | FDG3MK186K474KD5 |
| 1100 | 20                      | 42         | 50   | 35   | 37.5 | 20.3  | 16.5       | 800          | 2400          | 6.5                          | 30  | 8.5         | 40    | 1.2       | FDG3MK206K474KD5 |
| 1100 | 25                      | 42         | 55   | 40   | 37.5 | 20.3  | 20.5       | 1000         | 3000          | 5.0                          | 30  | 7.1         | 40    | 1.2       | FDG3MK256K494KD5 |
| 1100 | 30                      | 42         | 60   | 45   | 37.5 | 20.3  | 24.5       | 1200         | 3600          | 4.3                          | 30  | 5.8         | 40    | 1.2       | FDG3MK306K524KD5 |
| 1100 | 15                      | 57.5       | 45   | 25   | 52.5 | 10.2  | 6.5        | 300          | 900           | 16.5                         | 35  | 21.5        | 20    | 1.2       | FDG3MK156M104MB5 |
| 1100 | 20                      | 57.5       | 45   | 30   | 52.5 | 20.3  | 9.0        | 400          | 1200          | 11.5                         | 35  | 16.1        | 20    | 1.2       | FDG3MK206M164MD5 |

### Rating and Part Number

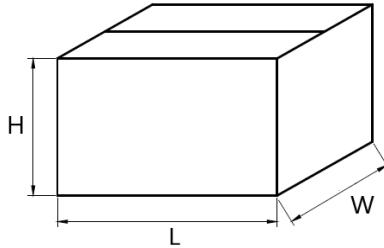
| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz<br>A 70°C | Peak Current<br>A | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|------|-------------------------|------------|---------|---------|---------|----------|-------------------------|-------------------|--------------------|---------------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|      |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |                         |                   |                    |                                       |           |                     |               |                 |                  |
| 1100 | 25                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 11.0                    | 500               | 1500               | 10.0                                  | 35        | 12.4                | 20            | 1.2             | FDG3MK256M204MD5 |
| 1100 | 30                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 13.0                    | 600               | 1800               | 8.6                                   | 35        | 10.3                | 20            | 1.2             | FDG3MK306M204MD5 |
| 1100 | 35                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 14.5                    | 700               | 2100               | 7.5                                   | 35        | 9.5                 | 20            | 1.2             | FDG3MK356M324MD5 |
| 1100 | 40                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 16.0                    | 800               | 2400               | 6.8                                   | 35        | 8.6                 | 20            | 1.2             | FDG3MK406M324MD5 |
| 1100 | 45                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 17.5                    | 900               | 2700               | 6.2                                   | 35        | 7.9                 | 20            | 1.2             | FDG3MK456M324MD5 |
| 1100 | 50                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 19.5                    | 1000              | 3000               | 5.6                                   | 35        | 7.0                 | 20            | 1.2             | FDG3MK506M344MD5 |
| 1100 | 55                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 21.5                    | 1100              | 3300               | 4.8                                   | 35        | 6.8                 | 20            | 1.2             | FDG3MK556M344MD5 |
| 1200 | 1                       | 32         | 20      | 11      | 27.5    | \        | 3.5                     | 90                | 270                | 35.0                                  | 25        | 35.0                | 90            | 0.8             | FDG3BK105G182GL5 |
| 1200 | 2                       | 32         | 24.5    | 15      | 27.5    | \        | 5.0                     | 180               | 540                | 24.0                                  | 25        | 25.0                | 90            | 0.8             | FDG3BK205G272GL5 |
| 1200 | 3                       | 32         | 30      | 16      | 27.5    | \        | 7.5                     | 270               | 810                | 13.0                                  | 25        | 20.5                | 90            | 0.8             | FDG3BK305G322GL5 |
| 1200 | 4                       | 32         | 33      | 18      | 27.5    | \        | 9.5                     | 360               | 1080               | 11.0                                  | 25        | 15.1                | 90            | 0.8             | FDG3BK405G342GL5 |
| 1200 | 5                       | 32         | 37      | 22      | 27.5    | \        | 10.5                    | 450               | 1350               | 10.5                                  | 25        | 13.0                | 90            | 0.8             | FDG3BK505G402GL5 |
| 1200 | 5                       | 32         | 37      | 22      | 27.5    | 10.2     | 12.0                    | 450               | 1350               | 9.5                                   | 25        | 11.0                | 90            | 1.0             | FDG3BK505G404GB5 |
| 1200 | 3                       | 42         | 30      | 17      | 37.5    | \        | 3.2                     | 135               | 405                | 35.0                                  | 28        | 41.9                | 45            | 1.0             | FDG3BK305K662KL5 |
| 1200 | 4                       | 42         | 30      | 17      | 37.5    | \        | 4.2                     | 180               | 540                | 28.0                                  | 28        | 30.4                | 45            | 1.0             | FDG3BK405K662KL5 |
| 1200 | 5                       | 42         | 32      | 19      | 37.5    | \        | 5.5                     | 225               | 675                | 21.5                                  | 28        | 23.1                | 45            | 1.0             | FDG3BK505K212KL5 |
| 1200 | 6                       | 42         | 40      | 20      | 37.5    | 10.2     | 6.5                     | 270               | 810                | 16.5                                  | 30        | 21.5                | 45            | 1.2             | FDG3BK605K244KB5 |
| 1200 | 7                       | 42         | 37      | 22      | 37.5    | 10.2     | 7.5                     | 315               | 945                | 13.0                                  | 30        | 20.5                | 45            | 1.2             | FDG3BK705K274KB5 |
| 1200 | 8                       | 42         | 44      | 24      | 37.5    | 10.2     | 8.5                     | 360               | 1080               | 12.0                                  | 30        | 17.3                | 45            | 1.2             | FDG3BK805K324KB5 |
| 1200 | 9                       | 42         | 44      | 24      | 37.5    | 10.2     | 10.0                    | 405               | 1215               | 10.8                                  | 30        | 13.9                | 45            | 1.2             | FDG3BK905K324KB5 |
| 1200 | 10                      | 42         | 44      | 24      | 37.5    | 10.2     | 11.0                    | 450               | 1350               | 10.0                                  | 30        | 12.4                | 45            | 1.2             | FDG3BK106K324KB5 |
| 1200 | 12                      | 42         | 45      | 30      | 37.5    | 20.3     | 13.0                    | 540               | 1620               | 8.5                                   | 30        | 10.4                | 45            | 1.2             | FDG3BK126K424KD5 |
| 1200 | 15                      | 42         | 50      | 35      | 37.5    | 20.3     | 16.0                    | 675               | 2025               | 6.8                                   | 30        | 8.6                 | 45            | 1.2             | FDG3BK156K474KD5 |
| 1200 | 18                      | 42         | 50      | 35      | 37.5    | 20.3     | 18.0                    | 810               | 2430               | 6.2                                   | 30        | 7.5                 | 45            | 1.2             | FDG3BK186K474KD5 |
| 1200 | 20                      | 42         | 55      | 40      | 37.5    | 20.3     | 20.0                    | 900               | 2700               | 5.5                                   | 30        | 6.8                 | 45            | 1.2             | FDG3BK206K494KD5 |
| 1200 | 25                      | 42         | 60      | 45      | 37.5    | 20.3     | 25.0                    | 1125              | 3375               | 4.3                                   | 30        | 5.6                 | 45            | 1.2             | FDG3BK256K524KD5 |
| 1200 | 12                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 6.5                     | 300               | 900                | 16.5                                  | 35        | 21.5                | 25            | 1.2             | FDG3BK126M104MB5 |
| 1200 | 15                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 7.5                     | 375               | 1125               | 13.0                                  | 35        | 20.5                | 25            | 1.2             | FDG3BK156M104MB5 |
| 1200 | 20                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 11.0                    | 500               | 1500               | 10.0                                  | 35        | 12.4                | 25            | 1.2             | FDG3BK206M164MD5 |
| 1200 | 25                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 13.0                    | 625               | 1875               | 8.6                                   | 35        | 10.3                | 25            | 1.2             | FDG3BK256M204MD5 |
| 1200 | 30                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 14.5                    | 750               | 2250               | 7.5                                   | 35        | 9.5                 | 25            | 1.2             | FDG3BK306M324MD5 |
| 1200 | 35                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 16.0                    | 875               | 2625               | 6.8                                   | 35        | 8.6                 | 25            | 1.2             | FDG3BK356M324MD5 |
| 1200 | 40                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 20.0                    | 1000              | 3000               | 5.5                                   | 35        | 6.8                 | 25            | 1.2             | FDG3BK406M344MD5 |
| 1200 | 45                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 22.5                    | 1125              | 3375               | 4.8                                   | 35        | 6.2                 | 25            | 1.2             | FDG3BK456M344MD5 |

## Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



## Packaging Quantity

| Pitch | Size Code | Dimension |      |    | Packaging Quantity |             |
|-------|-----------|-----------|------|----|--------------------|-------------|
|       |           | W         | H    | T  | Long Leads         | Short Leads |
| 27.5  | G15       | 32        | 18   | 9  | 340                | 340         |
|       | G18       | 32        | 20   | 11 | 280                | 280         |
|       | G21       | 32        | 22   | 13 | 230                | 230         |
|       | G22       | 32        | 24.5 | 13 | 230                | 230         |
|       | G26       | 32        | 28   | 14 | 220                | 220         |
|       | G27       | 32        | 24.5 | 15 | 200                | 200         |
|       | G32       | 32        | 30   | 16 | 190                | 190         |
|       | G34       | 32        | 33   | 18 | 170                | 170         |
|       | G40       | 32        | 37   | 22 | 140                | 140         |
| 37.5  | K21       | 42        | 32   | 19 | 112                | 112         |
|       | K24       | 42        | 40   | 20 | 105                | 105         |
|       | K27       | 42        | 37   | 22 | 98                 | 98          |
|       | K32       | 42        | 44   | 24 | 91                 | 91          |
|       | K37       | 42        | 37   | 28 | 77                 | 77          |
|       | K39       | 42        | 43   | 28 | 77                 | 77          |
|       | K42       | 42        | 45   | 30 | 70                 | 70          |
|       | K47       | 42        | 50   | 35 | 63                 | 63          |
|       | K49       | 42        | 55   | 40 | 49                 | 49          |
|       | K52       | 42        | 60   | 45 | 49                 | 49          |
| 52.5  | K66       | 42        | 30   | 17 | 126                | 126         |
|       | M10       | 57.5      | 45   | 25 | 60                 | 60          |
|       | M16       | 57.5      | 45   | 30 | 50                 | 50          |
|       | M20       | 57.5      | 50   | 35 | 45                 | 45          |
|       | M23       | 57.5      | 65   | 35 | 45                 | 45          |
|       | M32       | 57.5      | 55   | 45 | 35                 | 35          |
|       | M34       | 57.5      | 65   | 45 | 35                 | 35          |

## Overview

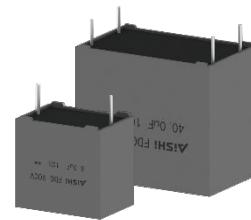
The FDQ capacitor is constructed of metallized polypropylene film encapsulated with epoxy resin in a plastic box, with 2 or 4 tinned copper wire. These FDQ series is suitable for harsh environment and qualify in accordance to AEC-Q200D requirement.

## Applications

Widely used in high performance DC Link, DC filtering, frequency converter, industrial power supply, solar inverter, energy storage, OBC and automotive.

## Features

- Self-healing
- High capacitance density
- Operating temperature range: - 40°C to 105°C
- High ripple current and low loss
- High contact reliability
- Suitable for high frequency applications
- Suitable for harsh environmental conditions
- THB Grade IIIB (85°C, 85% RH, 1000h at U<sub>NDC</sub>)
- Automotive Grade (AEC-Q200D)



## Qualification

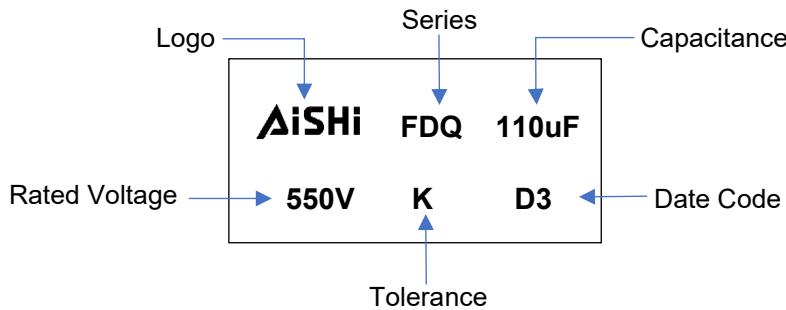
|                    |                                |
|--------------------|--------------------------------|
| Reference Standard | IEC 61071, EN 61071, AEC-Q200D |
| Climate Category   | 40/105/56 IEC 60068-1          |



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 450Vdc to 1200Vdc  |
| Capacitance Range           | 1.0µF to 200µF   |
| Capacitance Tolerance       | ±10% or ±20% at +25°C  |
| Operating Temperature Range | -40°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)  |
| Climatic Category           | 40/85/56 IEC 60068-1   |
| Dissipation Factor          | ≤0.002 (0.2%) at 1KHz; C ≤20µF at 25°C<br>≤0.003 (0.3%) at 1KHz; C >20µF at 25°C<br>≤0.004 (0.4%) at 1KHz; C >80µF at 25°C |
| Insulation Resistance       | RC between leads, IR xC≥30,000 s at 100vdc 1minute at +25°C  |

## Marking



## Part Number System

| F              | DQ   | 2J  | J                               | 117   | M20                      | 4MD                          | 5                               |
|----------------|--|---|---------------------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series   | Voltage (VDC)   | Tolerance                       | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | DC Link,<br>AEC-Q200<br>Type,<br>Metallized<br>PP Film | 450=2W<br>500=2H<br>550=2J<br>600=2K<br>700=2M<br>800=2N<br>900=2Q<br>1000=3K<br>1100=3M<br>1200=3B | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

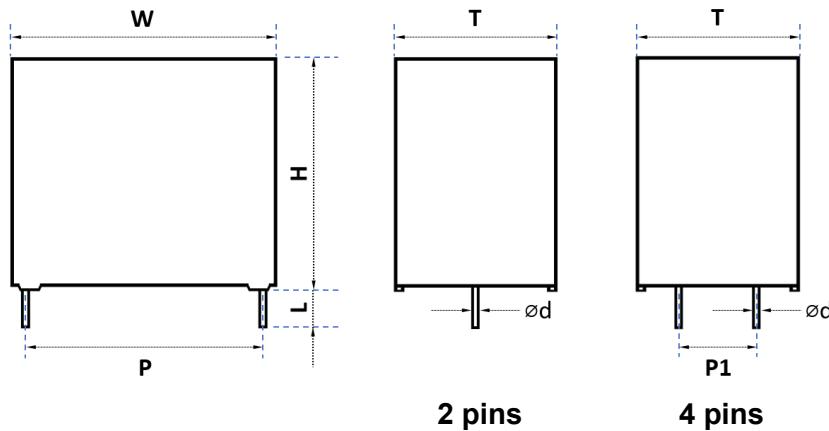
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 27.5mm                    | G | 10.2mm                            | B |
| 2 leads for straight cut          | 2 | 37.5mm                    | K | 12.7mm                            | G |
| 2 leads for forming cut           | E | 52.5mm                    | M | 20.3mm                            | D |
| 4 leads for straight cut          | 4 | N/A                       | N | N/A                               | L |
| 6 leads for straight cut          | 6 |                           |   |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| 20.0mm min  | L |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |    |           | Pitch |           |      |           | Ød      |         |           |
|-----------|-----------|-----------|------|-----------|----|-----------|-------|-----------|------|-----------|---------|---------|-----------|
|           | W         | Tolerance | H    | Tolerance | T  | Tolerance | P     | Tolerance | P1   | Tolerance | 4 Leads | 2 Leads | Tolerance |
| G15       | 32        | 0.8       | 18   | 0.8       | 9  | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G22       | 32        | 0.8       | 24.5 | 0.8       | 13 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G27       | 32        | 0.8       | 24.5 | 0.8       | 15 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G32       | 32        | 0.8       | 30   | 0.8       | 16 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22 | 0.8       | 27.5  | 0.5       | 10.2 | 0.5       | 1.0     | 0.8     | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19 | 1.0       | 37.5  | 0.5       | \    | \         | \       | 1.0     | 0.05      |
| K24       | 42        | 1.0       | 40   | 1.0       | 20 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K27       | 42        | 1.0       | 37   | 1.0       | 22 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K32       | 42        | 1.0       | 44   | 1.0       | 24 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K37       | 42        | 1.0       | 37   | 1.0       | 28 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K39       | 42        | 1.0       | 43   | 1.0       | 28 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K42       | 42        | 1.0       | 45   | 1.0       | 30 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.0     | 0.05      |
| K47       | 42        | 1.0       | 50   | 1.0       | 35 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.0     | 0.05      |
| K49       | 42        | 1.0       | 55   | 1.0       | 40 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.0     | 0.05      |
| K52       | 42        | 1.0       | 60   | 1.0       | 45 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.0     | 0.05      |
| K66       | 42        | 1.0       | 30   | 1.0       | 17 | 1.0       | 37.5  | 0.5       | \    | \         | \       | 1.0     | 0.05      |
| M10       | 57.5      | 1.0       | 45   | 1.0       | 25 | 1.0       | 52.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.2     | 0.05      |
| M16       | 57.5      | 1.0       | 45   | 1.0       | 30 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M20       | 57.5      | 1.0       | 50   | 1.0       | 35 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M23       | 57.5      | 1.0       | 65   | 1.0       | 35 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M32       | 57.5      | 1.0       | 55   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M34       | 57.5      | 1.0       | 65   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |

# Metallized Polypropylene Film DC-Link Capacitors

## FDQ Series - 450 ~ 1200VDC (Automotive Grade)

### Rating and Part Number

| Vdc | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current<br>A 70°C | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz | ESL<br>mΩ | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-------------------------|------------|---------|---------|---------|----------|---------------|------------------------|--------------------|---------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|     |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |                        |                    |                                 |           |                     |               |                 |                  |
| 450 | 5                       | 32         | 20      | 11      | 27.5    | \        | 5.0           | 325                    | 975                | 20.0                            | 25        | 30.0                | 65            | 0.8             | FDQ2WK505G182GL5 |
| 450 | 10                      | 32         | 24.5    | 15      | 27.5    | \        | 7.0           | 650                    | 1950               | 11.0                            | 25        | 27.8                | 65            | 0.8             | FDQ2WK106G272GL5 |
| 450 | 15                      | 32         | 33      | 18      | 27.5    | \        | 11.0          | 975                    | 2925               | 7.0                             | 25        | 17.7                | 65            | 0.8             | FDQ2WK156G342GL5 |
| 450 | 22                      | 32         | 37      | 22      | 27.5    | \        | 11.0          | 1430                   | 4290               | 5.0                             | 28        | 24.8                | 65            | 0.8             | FDQ2WK226G402GL5 |
| 450 | 25                      | 32         | 37      | 22      | 27.5    | \        | 12.0          | 1625                   | 4875               | 4.8                             | 28        | 24.8                | 65            | 0.8             | FDQ2WK256G402GL5 |
| 450 | 30                      | 42         | 40      | 20      | 37.5    | 10.2     | 12.5          | 1050                   | 3150               | 7.5                             | 30        | 12.8                | 35            | 1.2             | FDQ2WK306K244KB5 |
| 450 | 35                      | 42         | 37      | 22      | 37.5    | 10.2     | 13.5          | 1225                   | 3675               | 7.0                             | 30        | 11.8                | 35            | 1.2             | FDQ2WK406K274KB5 |
| 450 | 40                      | 42         | 37      | 28      | 37.5    | 10.2     | 14.5          | 1400                   | 4200               | 6.2                             | 30        | 11.5                | 35            | 1.2             | FDQ2WK406K374KB5 |
| 450 | 50                      | 42         | 43      | 28      | 37.5    | 10.2     | 16.0          | 1750                   | 5250               | 5.0                             | 30        | 11.7                | 35            | 1.2             | FDQ2WK506K394KB5 |
| 450 | 50                      | 42         | 45      | 30      | 37.5    | 20.3     | 16.0          | 1750                   | 5250               | 5.0                             | 30        | 11.7                | 35            | 1.2             | FDQ2WK506K424KD5 |
| 450 | 60                      | 42         | 45      | 30      | 37.5    | 20.3     | 16.5          | 2100                   | 6300               | 4.5                             | 30        | 12.2                | 35            | 1.2             | FDQ2WK606K424KD5 |
| 450 | 80                      | 42         | 50      | 35      | 37.5    | 20.3     | 20.5          | 2800                   | 8400               | 3.8                             | 30        | 12.2                | 35            | 1.2             | FDQ2WK806K474KD5 |
| 450 | 110                     | 42         | 60      | 45      | 37.5    | 20.3     | 24.5          | 3850                   | 11550              | 3.6                             | 30        | 12.2                | 35            | 1.2             | FDQ2WK117K524KD5 |
| 450 | 130                     | 42         | 60      | 45      | 37.5    | 20.3     | 28.5          | 4550                   | 13650              | 3.0                             | 30        | 12.2                | 35            | 1.2             | FDQ2WK137K524KD5 |
| 450 | 75                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.5          | 1500                   | 4500               | 5.5                             | 35        | 10.0                | 20            | 1.2             | FDQ2WK756M164MD5 |
| 450 | 80                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 17.0          | 1600                   | 4800               | 5.0                             | 35        | 10.4                | 20            | 1.2             | FDQ2WK806M164MD5 |
| 450 | 100                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.0          | 2000                   | 6000               | 4.5                             | 35        | 10.3                | 20            | 1.2             | FDQ2WK107M204MD5 |
| 450 | 110                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 19.0          | 2200                   | 6600               | 4.0                             | 35        | 10.4                | 20            | 1.2             | FDQ2WK117M204MD5 |
| 450 | 120                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 21.5          | 2400                   | 7200               | 3.8                             | 35        | 10.4                | 20            | 1.2             | FDQ2WK127M204MD5 |
| 450 | 160                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 28.5          | 3200                   | 9600               | 3.0                             | 35        | 10.4                | 20            | 1.2             | FDQ2WK167M324MD5 |
| 450 | 200                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0          | 4000                   | 12000              | 2.6                             | 35        | 10.4                | 20            | 1.2             | FDQ2WK207M344MD5 |
| 550 | 5                       | 32         | 22      | 13      | 27.5    | \        | 5.5           | 325                    | 975                | 19.5                            | 25        | 25.4                | 65            | 0.8             | FDQ2JK505G212GL5 |
| 550 | 10                      | 32         | 33      | 18      | 27.5    | \        | 7.5           | 650                    | 1950               | 10.5                            | 25        | 25.4                | 65            | 0.8             | FDQ2JK106G342GL5 |
| 550 | 15                      | 32         | 37      | 22      | 27.5    | \        | 11.5          | 975                    | 2925               | 6.8                             | 28        | 16.7                | 65            | 0.8             | FDQ2JK156G402GL5 |
| 550 | 22                      | 32         | 37      | 22      | 27.5    | \        | 11.5          | 1430                   | 4290               | 4.9                             | 28        | 23.1                | 65            | 0.8             | FDQ2JK226G402GL5 |
| 550 | 30                      | 42         | 44      | 24      | 37.5    | 10.2     | 13.0          | 1050                   | 3150               | 7.2                             | 30        | 12.3                | 35            | 1.2             | FDQ2JK306K324KB5 |
| 550 | 35                      | 42         | 45      | 30      | 37.5    | 20.3     | 13.8          | 1225                   | 3675               | 6.8                             | 30        | 11.6                | 35            | 1.2             | FDQ2JK356K424KD5 |
| 550 | 40                      | 42         | 45      | 30      | 37.5    | 20.3     | 14.8          | 1400                   | 4200               | 6.0                             | 30        | 11.4                | 35            | 1.2             | FDQ2JK406K424KD5 |
| 550 | 50                      | 42         | 50      | 35      | 37.5    | 20.3     | 17.0          | 1750                   | 5250               | 4.8                             | 30        | 10.8                | 35            | 1.2             | FDQ2JK506K474KD5 |
| 550 | 60                      | 42         | 50      | 35      | 37.5    | 20.3     | 18.0          | 2100                   | 6300               | 4.2                             | 30        | 11.0                | 35            | 1.2             | FDQ2JK606K474KD5 |
| 550 | 70                      | 42         | 50      | 35      | 37.5    | 20.3     | 20.5          | 2450                   | 7350               | 3.8                             | 30        | 11.0                | 35            | 1.2             | FDQ2JK706K474KD5 |
| 550 | 110                     | 42         | 60      | 45      | 37.5    | 20.3     | 24.5          | 3850                   | 11550              | 3.6                             | 30        | 11.0                | 35            | 1.2             | FDQ2JK117K524KD5 |
| 550 | 75                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.8          | 1500                   | 4500               | 5.2                             | 35        | 10.2                | 20            | 1.2             | FDQ2JK756M164MD5 |
| 550 | 100                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.5          | 2000                   | 6000               | 4.3                             | 35        | 10.2                | 20            | 1.2             | FDQ2JK107M204MD5 |
| 550 | 110                     | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0          | 2200                   | 6600               | 4.0                             | 35        | 9.4                 | 20            | 1.2             | FDQ2JK117M204MD5 |
| 550 | 140                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0          | 2800                   | 8400               | 3.5                             | 35        | 6.3                 | 20            | 1.2             | FDQ2JK147M324MD5 |
| 550 | 170                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 32.0          | 3400                   | 10200              | 2.8                             | 35        | 5.2                 | 20            | 1.2             | FDQ2JK177M344MD5 |
| 550 | 180                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0          | 3600                   | 10800              | 2.6                             | 35        | 5.2                 | 20            | 1.2             | FDQ2JK187M344MD5 |
| 600 | 2                       | 32         | 18      | 9       | 27.5    | \        | 2.9           | 130                    | 390                | 40.0                            | 25        | 44.6                | 65            | 0.8             | FDQ2KK205G152GL5 |
| 600 | 3                       | 32         | 20      | 11      | 27.5    | \        | 4.0           | 195                    | 585                | 28.0                            | 25        | 33.5                | 65            | 0.8             | FDQ2KK305G182GL5 |
| 600 | 4                       | 32         | 20      | 11      | 27.5    | \        | 5.5           | 260                    | 780                | 23.0                            | 25        | 21.6                | 65            | 0.8             | FDQ2KK405G182GL5 |
| 600 | 5                       | 32         | 22      | 13      | 27.5    | \        | 7.0           | 325                    | 975                | 14.5                            | 25        | 21.1                | 65            | 0.8             | FDQ2KK505G212GL5 |
| 600 | 6                       | 32         | 24.5    | 15      | 27.5    | \        | 7.3           | 390                    | 1170               | 13.0                            | 25        | 21.7                | 65            | 0.8             | FDQ2KK605G272GL5 |
| 600 | 7                       | 32         | 24.5    | 15      | 27.5    | \        | 8.5           | 455                    | 1365               | 12.0                            | 25        | 17.3                | 65            | 0.8             | FDQ2KK705G272GL5 |
| 600 | 8                       | 32         | 28      | 14      | 27.5    | \        | 9.5           | 520                    | 1560               | 11.0                            | 25        | 15.1                | 65            | 0.8             | FDQ2KK805G262GL5 |
| 600 | 9                       | 32         | 30      | 16      | 27.5    | \        | 10.5          | 585                    | 1755               | 10.5                            | 25        | 13.0                | 65            | 0.8             | FDQ2KK905G322GL5 |
| 600 | 10                      | 32         | 30      | 16      | 27.5    | \        | 11.0          | 650                    | 1950               | 10.0                            | 25        | 12.4                | 65            | 0.8             | FDQ2KK106G322GL5 |
| 600 | 12                      | 32         | 33      | 18      | 27.5    | \        | 12.0          | 780                    | 2340               | 9.5                             | 25        | 11.0                | 65            | 0.8             | FDQ2KK126G342GL5 |
| 600 | 15                      | 32         | 37      | 22      | 27.5    | \        | 12.0          | 975                    | 2925               | 9.5                             | 28        | 11.0                | 65            | 0.8             | FDQ2KK156G402GL5 |
| 600 | 15                      | 32         | 37      | 22      | 27.5    | 10.2     | 14.5          | 975                    | 2925               | 7.0                             | 28        | 10.2                | 65            | 1.0             | FDQ2KK156G404GB5 |
| 600 | 18                      | 32         | 37      | 22      | 27.5    | \        | 12.5          | 1170                   | 3510               | 9.0                             | 28        | 10.7                | 65            | 0.8             | FDQ2KK186G402GL5 |
| 600 | 18                      | 32         | 37      | 22      | 27.5    | 10.2     | 16.5          | 1170                   | 3510               | 6.0                             | 28        | 9.2                 | 65            | 1.0             | FDQ2KK186G404GB5 |
| 600 | 10                      | 42         | 30      | 17      | 37.5    | \        | 7.0           | 350                    | 1050               | 18.0                            | 28        | 17.0                | 35            | 1.0             | FDQ2KK106K662KL5 |
| 600 | 12                      | 42         | 30      | 17      | 37.5    | \        | 8.0           | 420                    | 1260               | 12.0                            | 28        | 19.5                | 35            | 1.0             | FDQ2KK126K662KL5 |
| 600 | 15                      | 42         | 32      | 19      | 37.5    | \        | 9.5           | 525                    | 1575               | 11.0                            | 28        | 15.1                | 35            | 1.0             | FDQ2KK156K212KL5 |
| 600 | 20                      | 42         | 40      | 20      | 37.5    | 10.2     | 12.5          | 700                    | 2100               | 9.0                             | 30        | 10.7                | 35            | 1.2             | FDQ2KK206K244KB5 |

# Metallized Polypropylene Film DC-Link Capacitors

## FDQ Series - 450 ~ 1200VDC (Automotive Grade)



### Rating and Part Number

| Vdc | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 600 | 22              | 42         | 40      | 20      | 37.5    | 10.2     | 13.5          | 770          | 2310          | 8.0                             | 30  | 10.3        | 35    | 1.2       | FDQ2KK226K244KB5 |
| 600 | 25              | 42         | 40      | 20      | 37.5    | 10.2     | 15.5          | 875          | 2625          | 7.0                             | 30  | 8.9         | 35    | 1.2       | FDQ2KK256K244KB5 |
| 600 | 30              | 42         | 44      | 24      | 37.5    | 10.2     | 16.5          | 1050         | 3150          | 6.5                             | 30  | 8.5         | 35    | 1.2       | FDQ2KK306K324KB5 |
| 600 | 35              | 42         | 45      | 30      | 37.5    | 20.3     | 18.5          | 1225         | 3675          | 6.0                             | 30  | 7.3         | 35    | 1.2       | FDQ2KK356K424KD5 |
| 600 | 40              | 42         | 45      | 30      | 37.5    | 20.3     | 20.5          | 1400         | 4200          | 5.0                             | 30  | 7.1         | 35    | 1.2       | FDQ2KK406K424KD5 |
| 600 | 45              | 42         | 50      | 35      | 37.5    | 20.3     | 23.0          | 1575         | 4725          | 4.5                             | 30  | 6.3         | 35    | 1.2       | FDQ2KK456K474KD5 |
| 600 | 50              | 42         | 50      | 35      | 37.5    | 20.3     | 25.0          | 1750         | 5250          | 4.0                             | 30  | 6.0         | 35    | 1.2       | FDQ2KK506K474KD5 |
| 600 | 60              | 42         | 55      | 40      | 37.5    | 20.3     | 27.0          | 2100         | 6300          | 3.8                             | 30  | 5.4         | 35    | 1.2       | FDQ2KK606K494KD5 |
| 600 | 70              | 42         | 55      | 40      | 37.5    | 20.3     | 29.0          | 2450         | 7350          | 3.5                             | 30  | 5.1         | 35    | 1.2       | FDQ2KK706K494KD5 |
| 600 | 75              | 42         | 60      | 45      | 37.5    | 20.3     | 30.0          | 2625         | 7875          | 3.0                             | 30  | 5.6         | 35    | 1.2       | FDQ2KK756K524KD5 |
| 600 | 80              | 42         | 60      | 45      | 37.5    | 20.3     | 32.0          | 2800         | 8400          | 2.8                             | 30  | 5.2         | 35    | 1.2       | FDQ2KK806K524KD5 |
| 600 | 85              | 42         | 60      | 45      | 37.5    | 20.3     | 34.0          | 2975         | 8925          | 2.5                             | 30  | 5.2         | 35    | 1.2       | FDQ2KK856K524KD5 |
| 600 | 40              | 57.5       | 45      | 25      | 52.5    | 10.2     | 13.5          | 800          | 2400          | 8.0                             | 35  | 10.3        | 20    | 1.2       | FDQ2KK406M104MB5 |
| 600 | 45              | 57.5       | 45      | 25      | 52.5    | 10.2     | 14.0          | 900          | 2700          | 7.5                             | 35  | 10.2        | 20    | 1.2       | FDQ2KK456M104MB5 |
| 600 | 50              | 57.5       | 45      | 25      | 52.5    | 10.2     | 15.5          | 1000         | 3000          | 7.0                             | 35  | 8.9         | 20    | 1.2       | FDQ2KK506M104MB5 |
| 600 | 55              | 57.5       | 45      | 30      | 52.5    | 20.3     | 17.0          | 1100         | 3300          | 6.2                             | 35  | 8.4         | 20    | 1.2       | FDQ2KK556M164MD5 |
| 600 | 60              | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.5          | 1200         | 3600          | 6.0                             | 35  | 7.3         | 20    | 1.2       | FDQ2KK606M164MD5 |
| 600 | 65              | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0          | 1300         | 3900          | 5.5                             | 35  | 6.8         | 20    | 1.2       | FDQ2KK656M204MD5 |
| 600 | 70              | 57.5       | 50      | 35      | 52.5    | 20.3     | 21.5          | 1400         | 4200          | 5.0                             | 35  | 6.5         | 20    | 1.2       | FDQ2KK706M204MD5 |
| 600 | 75              | 57.5       | 50      | 35      | 52.5    | 20.3     | 23.5          | 1500         | 4500          | 4.5                             | 35  | 6.0         | 20    | 1.2       | FDQ2KK756M204MD5 |
| 600 | 80              | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.5          | 1600         | 4800          | 4.2                             | 35  | 5.9         | 20    | 1.2       | FDQ2KK806M204MD5 |
| 600 | 90              | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0          | 1800         | 5400          | 4.0                             | 35  | 5.5         | 20    | 1.2       | FDQ2KK906M324MD5 |
| 600 | 100             | 57.5       | 55      | 45      | 52.5    | 20.3     | 29.0          | 2000         | 6000          | 3.4                             | 35  | 5.2         | 20    | 1.2       | FDQ2KK107M324MD5 |
| 600 | 110             | 57.5       | 55      | 45      | 52.5    | 20.3     | 30.0          | 2200         | 6600          | 3.0                             | 35  | 5.6         | 20    | 1.2       | FDQ2KK117M324MD5 |
| 600 | 120             | 57.5       | 65      | 45      | 52.5    | 20.3     | 32.0          | 2400         | 7200          | 2.8                             | 35  | 5.2         | 20    | 1.2       | FDQ2KK127M344MD5 |
| 600 | 130             | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0          | 2600         | 7800          | 2.6                             | 35  | 5.3         | 20    | 1.2       | FDQ2KK137M344MD5 |
| 600 | 140             | 57.5       | 65      | 45      | 52.5    | 20.3     | 34.0          | 2800         | 8400          | 2.5                             | 35  | 5.2         | 20    | 1.2       | FDQ2KK147M344MD5 |
| 700 | 2               | 32         | 18      | 9       | 27.5    | \        | 2.9           | 130          | 390           | 40.0                            | 25  | 44.6        | 65    | 0.8       | FDQ2MK205G152GL5 |
| 700 | 3               | 32         | 20      | 11      | 27.5    | \        | 4.0           | 195          | 585           | 28.0                            | 25  | 33.5        | 65    | 0.8       | FDQ2MK305G182GL5 |
| 700 | 4               | 32         | 20      | 11      | 27.5    | \        | 5.5           | 260          | 780           | 23.0                            | 25  | 21.6        | 65    | 0.8       | FDQ2MK405G182GL5 |
| 700 | 5               | 32         | 22      | 13      | 27.5    | \        | 7.0           | 325          | 975           | 14.5                            | 25  | 21.1        | 65    | 0.8       | FDQ2MK505G212GL5 |
| 700 | 6               | 32         | 24.5    | 15      | 27.5    | \        | 7.3           | 390          | 1170          | 13.0                            | 25  | 21.7        | 65    | 0.8       | FDQ2MK605G272GL5 |
| 700 | 7               | 32         | 24.5    | 15      | 27.5    | \        | 8.5           | 455          | 1365          | 12.0                            | 25  | 17.3        | 65    | 0.8       | FDQ2MK705G272GL5 |
| 700 | 8               | 32         | 28      | 14      | 27.5    | \        | 9.5           | 520          | 1560          | 11.0                            | 25  | 15.1        | 65    | 0.8       | FDQ2MK805G262GL5 |
| 700 | 9               | 32         | 30      | 16      | 27.5    | \        | 10.5          | 585          | 1755          | 10.5                            | 25  | 13.0        | 65    | 0.8       | FDQ2MK905G322GL5 |
| 700 | 10              | 32         | 30      | 16      | 27.5    | \        | 11.0          | 650          | 1950          | 10.0                            | 25  | 12.4        | 65    | 0.8       | FDQ2MK106G322GL5 |
| 700 | 12              | 32         | 33      | 18      | 27.5    | \        | 12.0          | 780          | 2340          | 9.5                             | 25  | 11.0        | 65    | 0.8       | FDQ2MK126G342GL5 |
| 700 | 15              | 32         | 37      | 22      | 27.5    | \        | 12.0          | 975          | 2925          | 9.5                             | 28  | 11.0        | 65    | 0.8       | FDQ2MK156G402GL5 |
| 700 | 15              | 32         | 37      | 22      | 27.5    | 10.2     | 14.5          | 975          | 2925          | 7.0                             | 28  | 10.2        | 65    | 1.0       | FDQ2MK156G404GB5 |
| 700 | 18              | 32         | 37      | 22      | 27.5    | \        | 12.5          | 1170         | 3510          | 9.0                             | 28  | 10.7        | 65    | 0.8       | FDQ2MK186G402GL5 |
| 700 | 18              | 32         | 37      | 22      | 27.5    | 10.2     | 16.5          | 1170         | 3510          | 6.0                             | 28  | 9.2         | 65    | 1.0       | FDQ2MK186G404GB5 |
| 700 | 10              | 42         | 30      | 17      | 37.5    | \        | 7.0           | 350          | 1050          | 18.0                            | 28  | 17.0        | 35    | 1.0       | FDQ2MK106K662KL5 |
| 700 | 12              | 42         | 30      | 17      | 37.5    | \        | 8.0           | 420          | 1260          | 12.0                            | 28  | 19.5        | 35    | 1.0       | FDQ2MK126K662KL5 |
| 700 | 15              | 42         | 32      | 19      | 37.5    | \        | 9.5           | 525          | 1575          | 11.0                            | 28  | 15.1        | 35    | 1.0       | FDQ2MK156K212KL5 |
| 700 | 20              | 42         | 40      | 20      | 37.5    | 10.2     | 12.5          | 700          | 2100          | 9.0                             | 30  | 10.7        | 35    | 1.2       | FDQ2MK206K244KB5 |
| 700 | 22              | 42         | 40      | 20      | 37.5    | 10.2     | 13.5          | 770          | 2310          | 8.0                             | 30  | 10.3        | 35    | 1.2       | FDQ2MK226K244KB5 |
| 700 | 25              | 42         | 40      | 20      | 37.5    | 10.2     | 15.5          | 875          | 2625          | 7.0                             | 30  | 8.9         | 35    | 1.2       | FDQ2MK256K244KB5 |
| 700 | 30              | 42         | 44      | 24      | 37.5    | 10.2     | 16.5          | 1050         | 3150          | 6.5                             | 30  | 8.5         | 35    | 1.2       | FDQ2MK306K324KB5 |
| 700 | 35              | 42         | 45      | 30      | 37.5    | 20.3     | 18.5          | 1225         | 3675          | 6.0                             | 30  | 7.3         | 35    | 1.2       | FDQ2MK356K424KD5 |
| 700 | 40              | 42         | 45      | 30      | 37.5    | 20.3     | 20.5          | 1400         | 4200          | 5.0                             | 30  | 7.1         | 35    | 1.2       | FDQ2MK406K424KD5 |
| 700 | 45              | 42         | 50      | 35      | 37.5    | 20.3     | 23.0          | 1575         | 4725          | 4.5                             | 30  | 6.3         | 35    | 1.2       | FDQ2MK456K474KD5 |
| 700 | 50              | 42         | 50      | 35      | 37.5    | 20.3     | 25.0          | 1750         | 5250          | 4.0                             | 30  | 6.0         | 35    | 1.2       | FDQ2MK506K474KD5 |
| 700 | 60              | 42         | 55      | 40      | 37.5    | 20.3     | 27.0          | 2100         | 6300          | 3.8                             | 30  | 5.4         | 35    | 1.2       | FDQ2MK606K494KD5 |
| 700 | 70              | 42         | 55      | 40      | 37.5    | 20.3     | 29.0          | 2450         | 7350          | 3.5                             | 30  | 5.1         | 35    | 1.2       | FDQ2MK706K494KD5 |
| 700 | 75              | 42         | 60      | 45      | 37.5    | 20.3     | 30.0          | 2625         | 7875          | 3.0                             | 30  | 5.6         | 35    | 1.2       | FDQ2MK756K524KD5 |
| 700 | 80              | 42         | 60      | 45      | 37.5    | 20.3     | 32.0          | 2800         | 8400          | 2.8                             | 30  | 5.2         | 35    | 1.2       | FDQ2MK806K524KD5 |

# Metallized Polypropylene Film DC-Link Capacitors

## FDQ Series - 450 ~ 1200VDC (Automotive Grade)

### Rating and Part Number

| Vdc | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current<br>A 70°C | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz | ESL<br>mΩ | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-------------------------|------------|---------|---------|---------|----------|---------------|------------------------|--------------------|---------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|     |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |                        |                    |                                 |           |                     |               |                 |                  |
| 700 | 85                      | 42         | 60      | 45      | 37.5    | 20.3     | 34.0          | 2975                   | 8925               | 2.5                             | 30        | 5.2                 | 35            | 1.2             | FDQ2MK856K524KD5 |
| 700 | 40                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 13.5          | 800                    | 2400               | 8.0                             | 35        | 10.3                | 20            | 1.2             | FDQ2MK406M104MB5 |
| 700 | 45                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 14.0          | 900                    | 2700               | 7.5                             | 35        | 10.2                | 20            | 1.2             | FDQ2MK456M104MB5 |
| 700 | 50                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 15.5          | 1000                   | 3000               | 7.0                             | 35        | 8.9                 | 20            | 1.2             | FDQ2MK506M104MB5 |
| 700 | 55                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 17.0          | 1100                   | 3300               | 6.2                             | 35        | 8.4                 | 20            | 1.2             | FDQ2MK556M164MD5 |
| 700 | 60                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.5          | 1200                   | 3600               | 6.0                             | 35        | 7.3                 | 20            | 1.2             | FDQ2MK606M164MD5 |
| 700 | 65                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0          | 1300                   | 3900               | 5.5                             | 35        | 6.8                 | 20            | 1.2             | FDQ2MK656M204MD5 |
| 700 | 70                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 21.5          | 1400                   | 4200               | 5.0                             | 35        | 6.5                 | 20            | 1.2             | FDQ2MK706M204MD5 |
| 700 | 75                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 23.5          | 1500                   | 4500               | 4.5                             | 35        | 6.0                 | 20            | 1.2             | FDQ2MK756M204MD5 |
| 700 | 80                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.5          | 1600                   | 4800               | 4.2                             | 35        | 5.9                 | 20            | 1.2             | FDQ2MK806M204MD5 |
| 700 | 90                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0          | 1800                   | 5400               | 4.0                             | 35        | 5.5                 | 20            | 1.2             | FDQ2MK906M324MD5 |
| 700 | 100                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 29.0          | 2000                   | 6000               | 3.4                             | 35        | 5.2                 | 20            | 1.2             | FDQ2MK107M324MD5 |
| 700 | 110                     | 57.5       | 55      | 45      | 52.5    | 20.3     | 30.0          | 2200                   | 6600               | 3.0                             | 35        | 5.6                 | 20            | 1.2             | FDQ2MK117M324MD5 |
| 700 | 120                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 32.0          | 2400                   | 7200               | 2.8                             | 35        | 5.2                 | 20            | 1.2             | FDQ2MK127M344MD5 |
| 700 | 130                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 33.0          | 2600                   | 7800               | 2.6                             | 35        | 5.3                 | 20            | 1.2             | FDQ2MK137M344MD5 |
| 700 | 140                     | 57.5       | 65      | 45      | 52.5    | 20.3     | 34.0          | 2800                   | 8400               | 2.5                             | 35        | 5.2                 | 20            | 1.2             | FDQ2MK147M344MD5 |
| 800 | 2                       | 32         | 18      | 9       | 27.5    | \        | 2.9           | 130                    | 390                | 40.0                            | 25        | 44.6                | 65            | 0.8             | FDQ2NK205G152GL5 |
| 800 | 3                       | 32         | 20      | 11      | 27.5    | \        | 4.5           | 195                    | 585                | 26.0                            | 25        | 28.5                | 65            | 0.8             | FDQ2NK305G182GL5 |
| 800 | 4                       | 32         | 24.5    | 13      | 27.5    | \        | 5.8           | 260                    | 780                | 22.0                            | 25        | 20.3                | 65            | 0.8             | FDQ2NK405G222GL5 |
| 800 | 5                       | 32         | 24.5    | 15      | 27.5    | \        | 7.5           | 325                    | 975                | 14.0                            | 25        | 19.0                | 65            | 0.8             | FDQ2NK505G272GL5 |
| 800 | 6                       | 32         | 30      | 16      | 27.5    | \        | 8.5           | 390                    | 1170               | 12.0                            | 25        | 17.3                | 65            | 0.8             | FDQ2NK605G322GL5 |
| 800 | 7                       | 32         | 30      | 16      | 27.5    | \        | 9.5           | 455                    | 1365               | 11.0                            | 25        | 15.1                | 65            | 0.8             | FDQ2NK705G322GL5 |
| 800 | 8                       | 32         | 33      | 18      | 27.5    | \        | 10.5          | 520                    | 1560               | 10.5                            | 25        | 13.0                | 65            | 0.8             | FDQ2NK805G342GL5 |
| 800 | 9                       | 32         | 33      | 18      | 27.5    | \        | 11.5          | 585                    | 1755               | 10.2                            | 25        | 11.1                | 65            | 0.8             | FDQ2NK905G342GL5 |
| 800 | 10                      | 32         | 37      | 22      | 27.5    | \        | 12.0          | 650                    | 1950               | 9.5                             | 25        | 11.0                | 65            | 0.8             | FDQ2NK106G402GL5 |
| 800 | 10                      | 32         | 37      | 22      | 27.5    | 10.2     | 14.0          | 650                    | 1950               | 8.5                             | 25        | 9.0                 | 65            | 1.0             | FDQ2NK106G404GB5 |
| 800 | 12                      | 32         | 37      | 22      | 27.5    | \        | 12.0          | 780                    | 2340               | 9.5                             | 25        | 11.0                | 65            | 0.8             | FDQ2NK126G402GL5 |
| 800 | 12                      | 32         | 37      | 22      | 27.5    | 10.2     | 15.0          | 780                    | 2340               | 8.0                             | 25        | 8.3                 | 65            | 1.0             | FDQ2NK126G404GB5 |
| 800 | 14                      | 32         | 37      | 22      | 27.5    | \        | 12.0          | 910                    | 2730               | 9.5                             | 25        | 11.0                | 65            | 0.8             | FDQ2NK146G402GL5 |
| 800 | 14                      | 32         | 37      | 22      | 27.5    | 10.2     | 16.0          | 910                    | 2730               | 7.5                             | 25        | 7.8                 | 65            | 1.0             | FDQ2NK146G404GB5 |
| 800 | 8                       | 42         | 30      | 17      | 37.5    | \        | 5.5           | 280                    | 840                | 22.5                            | 28        | 22.0                | 35            | 1.0             | FDQ2NK805K662KL5 |
| 800 | 9                       | 42         | 30      | 17      | 37.5    | \        | 6.0           | 315                    | 945                | 21.5                            | 28        | 19.4                | 35            | 1.0             | FDQ2NK905K662KL5 |
| 800 | 10                      | 42         | 32      | 19      | 37.5    | \        | 7.0           | 350                    | 1050               | 18.0                            | 28        | 17.0                | 35            | 1.0             | FDQ2NK106K212KL5 |
| 800 | 12                      | 42         | 32      | 19      | 37.5    | \        | 8.0           | 420                    | 1260               | 12.0                            | 28        | 19.5                | 35            | 1.0             | FDQ2NK126K212KL5 |
| 800 | 14                      | 42         | 32      | 19      | 37.5    | \        | 9.5           | 490                    | 1470               | 11.0                            | 28        | 15.1                | 35            | 1.0             | FDQ2NK146K212KL5 |
| 800 | 15                      | 42         | 40      | 20      | 37.5    | 10.2     | 12.5          | 525                    | 1575               | 9.0                             | 30        | 10.7                | 35            | 1.2             | FDQ2NK156K244KB5 |
| 800 | 20                      | 42         | 44      | 24      | 37.5    | 10.2     | 13.5          | 700                    | 2100               | 8.0                             | 30        | 10.3                | 35            | 1.2             | FDQ2NK206K324KB5 |
| 800 | 25                      | 42         | 44      | 24      | 37.5    | 10.2     | 16.5          | 875                    | 2625               | 6.5                             | 30        | 8.5                 | 35            | 1.2             | FDQ2NK256K324KB5 |
| 800 | 30                      | 42         | 45      | 30      | 37.5    | 20.3     | 20.0          | 1050                   | 3150               | 5.8                             | 30        | 6.5                 | 35            | 1.2             | FDQ2NK306K424KD5 |
| 800 | 35                      | 42         | 50      | 35      | 37.5    | 20.3     | 22.0          | 1225                   | 3675               | 5.5                             | 30        | 5.6                 | 35            | 1.2             | FDQ2NK356K474KD5 |
| 800 | 40                      | 42         | 50      | 35      | 37.5    | 20.3     | 25.0          | 1400                   | 4200               | 4.8                             | 30        | 5.0                 | 35            | 1.2             | FDQ2NK406K474KD5 |
| 800 | 45                      | 42         | 55      | 40      | 37.5    | 20.3     | 28.0          | 1575                   | 4725               | 4.0                             | 30        | 4.8                 | 35            | 1.2             | FDQ2NK456K494KD5 |
| 800 | 50                      | 42         | 55      | 40      | 37.5    | 20.3     | 31.0          | 1750                   | 5250               | 3.6                             | 30        | 4.3                 | 35            | 1.2             | FDQ2NK506K494KD5 |
| 800 | 55                      | 42         | 60      | 45      | 37.5    | 20.3     | 32.5          | 1925                   | 5775               | 3.4                             | 30        | 4.2                 | 35            | 1.2             | FDQ2NK556K524KD5 |
| 800 | 60                      | 42         | 60      | 45      | 37.5    | 20.3     | 34.0          | 2100                   | 6300               | 3.2                             | 30        | 4.1                 | 35            | 1.2             | FDQ2NK606K524KD5 |
| 800 | 65                      | 42         | 60      | 45      | 37.5    | 20.3     | 35.0          | 2275                   | 6825               | 2.8                             | 30        | 4.4                 | 35            | 1.2             | FDQ2NK656K524KD5 |
| 800 | 25                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 8.5           | 500                    | 1500               | 12.0                            | 35        | 17.3                | 20            | 1.2             | FDQ2NK256M104MB5 |
| 800 | 30                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 10.0          | 600                    | 1800               | 10.5                            | 35        | 14.3                | 20            | 1.2             | FDQ2NK306M104MB5 |
| 800 | 35                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 12.0          | 700                    | 2100               | 9.5                             | 35        | 11.0                | 20            | 1.2             | FDQ2NK356M104MB5 |
| 800 | 40                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 14.0          | 800                    | 2400               | 8.5                             | 35        | 9.0                 | 20            | 1.2             | FDQ2NK406M164MD5 |
| 800 | 45                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 15.5          | 900                    | 2700               | 7.0                             | 35        | 8.9                 | 20            | 1.2             | FDQ2NK456M164MD5 |
| 800 | 50                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 17.0          | 1000                   | 3000               | 5.8                             | 35        | 8.9                 | 20            | 1.2             | FDQ2NK506M204MD5 |
| 800 | 55                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 19.0          | 1100                   | 3300               | 5.5                             | 35        | 7.6                 | 20            | 1.2             | FDQ2NK556M204MD5 |
| 800 | 60                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 21.0          | 1200                   | 3600               | 4.8                             | 35        | 7.1                 | 20            | 1.2             | FDQ2NK606M204MD5 |
| 800 | 65                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 22.5          | 1300                   | 3900               | 4.6                             | 35        | 6.4                 | 20            | 1.2             | FDQ2NK656M324MD5 |
| 800 | 70                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 24.0          | 1400                   | 4200               | 4.5                             | 35        | 5.8                 | 20            | 1.2             | FDQ2NK706M324MD5 |

# Metalized Polypropylene Film DC-Link Capacitors

## FDQ Series - 450 ~ 1200VDC (Automotive Grade)



### Rating and Part Number

| Vdc  | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|------|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|      |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 800  | 75              | 57.5       | 55      | 45      | 52.5    | 20.3     | 25.5          | 1500         | 4500          | 4.3                             | 35  | 5.4         | 20    | 1.2       | FDQ2NK756M324MD5 |
| 800  | 80              | 57.5       | 55      | 45      | 52.5    | 20.3     | 26.0          | 1600         | 4800          | 4.2                             | 35  | 5.3         | 20    | 1.2       | FDQ2NK806M324MD5 |
| 800  | 90              | 57.5       | 55      | 45      | 52.5    | 20.3     | 27.5          | 1800         | 5400          | 4.0                             | 35  | 5.0         | 20    | 1.2       | FDQ2NK906M324MD5 |
| 800  | 100             | 57.5       | 65      | 45      | 52.5    | 20.3     | 31.5          | 2000         | 6000          | 3.2                             | 35  | 4.7         | 20    | 1.2       | FDQ2NK107M344MD5 |
| 800  | 110             | 57.5       | 65      | 45      | 52.5    | 20.3     | 34.0          | 2200         | 6600          | 3.0                             | 35  | 4.3         | 20    | 1.2       | FDQ2NK117M344MD5 |
| 900  | 1               | 32         | 18      | 9       | 27.5    | \        | 2.0           | 70           | 210           | 65.0                            | 25  | 57.7        | 70    | 0.8       | FDQ2QK105G152GL5 |
| 900  | 2               | 32         | 20      | 11      | 27.5    | \        | 3.2           | 140          | 420           | 38.0                            | 25  | 38.5        | 70    | 0.8       | FDQ2QK205G182GL5 |
| 900  | 3               | 32         | 22      | 13      | 27.5    | \        | 4.8           | 210          | 630           | 30.0                            | 25  | 21.7        | 70    | 0.8       | FDQ2QK305G212GL5 |
| 900  | 4               | 32         | 24.5    | 15      | 27.5    | \        | 6.0           | 280          | 840           | 20.5                            | 25  | 20.3        | 70    | 0.8       | FDQ2QK405G272GL5 |
| 900  | 5               | 32         | 30      | 16      | 27.5    | \        | 7.5           | 350          | 1050          | 12.0                            | 25  | 22.2        | 70    | 0.8       | FDQ2QK505G322GL5 |
| 900  | 6               | 32         | 33      | 18      | 27.5    | \        | 7.8           | 420          | 1260          | 11.5                            | 25  | 21.4        | 70    | 0.8       | FDQ2QK605G342GL5 |
| 900  | 7               | 32         | 33      | 18      | 27.5    | \        | 10.5          | 490          | 1470          | 10.2                            | 25  | 13.3        | 70    | 0.8       | FDQ2QK705G342GL5 |
| 900  | 8               | 32         | 37      | 22      | 27.5    | \        | 11.5          | 560          | 1680          | 9.5                             | 25  | 11.9        | 70    | 0.8       | FDQ2QK805G402GL5 |
| 900  | 8               | 32         | 37      | 22      | 27.5    | 10.2     | 12.5          | 560          | 1680          | 9.0                             | 25  | 10.7        | 70    | 1.0       | FDQ2QK805G404GB5 |
| 900  | 9               | 32         | 37      | 22      | 27.5    | \        | 11.8          | 630          | 1890          | 9.7                             | 25  | 11.1        | 70    | 0.8       | FDQ2QK905G402GL5 |
| 900  | 9               | 32         | 37      | 22      | 27.5    | 10.2     | 14.0          | 630          | 1890          | 7.8                             | 25  | 9.8         | 70    | 1.0       | FDQ2QK905G404GB5 |
| 900  | 10              | 32         | 37      | 22      | 27.5    | \        | 12.0          | 700          | 2100          | 9.5                             | 25  | 11.0        | 70    | 0.8       | FDQ2QK106G402GL5 |
| 900  | 10              | 32         | 37      | 22      | 27.5    | 10.2     | 15.5          | 700          | 2100          | 7.2                             | 25  | 8.7         | 70    | 1.0       | FDQ2QK106G404GB5 |
| 900  | 5               | 42         | 30      | 17      | 37.5    | \        | 3.8           | 175          | 525           | 28.0                            | 28  | 37.1        | 35    | 1.0       | FDQ2QK505K662KL5 |
| 900  | 6               | 42         | 30      | 17      | 37.5    | \        | 4.5           | 210          | 630           | 25.0                            | 28  | 29.6        | 35    | 1.0       | FDQ2QK605K662KL5 |
| 900  | 7               | 42         | 30      | 17      | 37.5    | \        | 5.0           | 245          | 735           | 22.0                            | 28  | 27.3        | 35    | 1.0       | FDQ2QK705K662KL5 |
| 900  | 8               | 42         | 32      | 19      | 37.5    | \        | 6.0           | 280          | 840           | 19.5                            | 28  | 21.4        | 35    | 1.0       | FDQ2QK805K212KL5 |
| 900  | 10              | 42         | 40      | 20      | 37.5    | 10.2     | 7.5           | 350          | 1050          | 13.0                            | 30  | 20.5        | 35    | 1.2       | FDQ2QK106K244KB5 |
| 900  | 12              | 42         | 37      | 22      | 37.5    | 10.2     | 9.0           | 420          | 1260          | 11.5                            | 30  | 16.1        | 35    | 1.2       | FDQ2QK126K274KB5 |
| 900  | 15              | 42         | 44      | 24      | 37.5    | 10.2     | 10.5          | 525          | 1575          | 10.5                            | 30  | 13.0        | 35    | 1.2       | FDQ2QK156K324KB5 |
| 900  | 18              | 42         | 44      | 24      | 37.5    | 10.2     | 13.0          | 630          | 1890          | 8.8                             | 30  | 10.1        | 35    | 1.2       | FDQ2QK186K324KB5 |
| 900  | 20              | 42         | 44      | 24      | 37.5    | 10.2     | 14.5          | 700          | 2100          | 7.5                             | 30  | 9.5         | 35    | 1.2       | FDQ2QK206K324KB5 |
| 900  | 25              | 42         | 45      | 30      | 37.5    | 20.3     | 17.5          | 875          | 2625          | 6.2                             | 30  | 7.9         | 35    | 1.2       | FDQ2QK256K424KD5 |
| 900  | 30              | 42         | 50      | 35      | 37.5    | 20.3     | 21.5          | 1050         | 3150          | 5.0                             | 30  | 6.5         | 35    | 1.2       | FDQ2QK306K474KD5 |
| 900  | 35              | 42         | 55      | 40      | 37.5    | 20.3     | 23.0          | 1225         | 3675          | 4.6                             | 30  | 6.2         | 35    | 1.2       | FDQ2QK356K494KD5 |
| 900  | 40              | 42         | 55      | 40      | 37.5    | 20.3     | 26.5          | 1400         | 4200          | 3.9                             | 30  | 5.5         | 35    | 1.2       | FDQ2QK406K494KD5 |
| 900  | 45              | 42         | 60      | 45      | 37.5    | 20.3     | 30.0          | 1575         | 4725          | 3.4                             | 30  | 4.9         | 35    | 1.2       | FDQ2QK456K524KD5 |
| 900  | 50              | 42         | 60      | 45      | 37.5    | 20.3     | 33.5          | 1750         | 5250          | 3.0                             | 30  | 4.5         | 35    | 1.2       | FDQ2QK506K524KD5 |
| 900  | 15              | 57.5       | 45      | 25      | 52.5    | 10.2     | 5.5           | 300          | 900           | 22.0                            | 35  | 22.5        | 20    | 1.2       | FDQ2QK156M104MB5 |
| 900  | 20              | 57.5       | 45      | 25      | 52.5    | 10.2     | 7.5           | 400          | 1200          | 13.5                            | 35  | 19.8        | 20    | 1.2       | FDQ2QK206M104MB5 |
| 900  | 25              | 57.5       | 45      | 25      | 52.5    | 10.2     | 9.0           | 500          | 1500          | 11.5                            | 35  | 16.1        | 20    | 1.2       | FDQ2QK256M104MB5 |
| 900  | 30              | 57.5       | 45      | 30      | 52.5    | 20.3     | 11.0          | 600          | 1800          | 10.0                            | 35  | 12.4        | 20    | 1.2       | FDQ2QK306M164MD5 |
| 900  | 35              | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5          | 700          | 2100          | 9.0                             | 35  | 10.7        | 20    | 1.2       | FDQ2QK356M164MD5 |
| 900  | 40              | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.5          | 800          | 2400          | 7.5                             | 35  | 9.5         | 20    | 1.2       | FDQ2QK406M204MD5 |
| 900  | 45              | 57.5       | 50      | 35      | 52.5    | 20.3     | 16.0          | 900          | 2700          | 6.8                             | 35  | 8.6         | 20    | 1.2       | FDQ2QK456M204MD5 |
| 900  | 50              | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.0          | 1000         | 3000          | 6.4                             | 35  | 7.2         | 20    | 1.2       | FDQ2QK506M204MD5 |
| 900  | 55              | 57.5       | 55      | 45      | 52.5    | 20.3     | 20.0          | 1100         | 3300          | 5.6                             | 35  | 6.7         | 20    | 1.2       | FDQ2QK556M324MD5 |
| 900  | 60              | 57.5       | 55      | 45      | 52.5    | 20.3     | 21.5          | 1200         | 3600          | 4.8                             | 35  | 6.8         | 20    | 1.2       | FDQ2QK606M324MD5 |
| 900  | 65              | 57.5       | 55      | 45      | 52.5    | 20.3     | 23.0          | 1300         | 3900          | 4.5                             | 35  | 6.3         | 20    | 1.2       | FDQ2QK656M324MD5 |
| 900  | 70              | 57.5       | 65      | 45      | 52.5    | 20.3     | 25.0          | 1400         | 4200          | 4.0                             | 35  | 6.0         | 20    | 1.2       | FDQ2QK706M344MD5 |
| 900  | 75              | 57.5       | 65      | 45      | 52.5    | 20.3     | 25.5          | 1500         | 4500          | 3.9                             | 35  | 5.9         | 20    | 1.2       | FDQ2QK756M344MD5 |
| 900  | 80              | 57.5       | 65      | 45      | 52.5    | 20.3     | 26.5          | 1600         | 4800          | 3.8                             | 35  | 5.6         | 20    | 1.2       | FDQ2QK806M344MD5 |
| 900  | 85              | 57.5       | 65      | 45      | 52.5    | 20.3     | 28.5          | 1700         | 5100          | 3.6                             | 35  | 5.1         | 20    | 1.2       | FDQ2QK856M344MD5 |
| 1000 | 1               | 32         | 18      | 9       | 27.5    | \        | 2.0           | 75           | 225           | 65.0                            | 25  | 57.7        | 75    | 0.8       | FDQ3KK105G152GL5 |
| 1000 | 2               | 32         | 22      | 13      | 27.5    | \        | 3.5           | 150          | 450           | 38.0                            | 25  | 32.2        | 75    | 0.8       | FDQ3KK205G212GL5 |
| 1000 | 3               | 32         | 24.5    | 15      | 27.5    | \        | 5.0           | 225          | 675           | 22.0                            | 25  | 27.3        | 75    | 0.8       | FDQ3KK305G272GL5 |
| 1000 | 4               | 32         | 30      | 16      | 27.5    | \        | 7.0           | 300          | 900           | 16.5                            | 25  | 18.6        | 75    | 0.8       | FDQ3KK405G322GL5 |
| 1000 | 5               | 32         | 33      | 18      | 27.5    | \        | 8.5           | 375          | 1125          | 12.5                            | 25  | 16.6        | 75    | 0.8       | FDQ3KK505G342GL5 |
| 1000 | 6               | 32         | 33      | 18      | 27.5    | \        | 9.0           | 450          | 1350          | 11.5                            | 25  | 16.1        | 75    | 0.8       | FDQ3KK605G342GL5 |
| 1000 | 7               | 32         | 37      | 22      | 27.5    | \        | 9.5           | 525          | 1575          | 11.0                            | 25  | 15.1        | 75    | 0.8       | FDQ3KK705G404GL5 |
| 1000 | 7               | 32         | 37      | 22      | 27.5    | 10.2     | 11.5          | 525          | 1575          | 9.8                             | 25  | 11.6        | 75    | 1.0       | FDQ3KK705G404GB5 |

# Metalized Polypropylene Film DC-Link Capacitors

## FDQ Series - 450 ~ 1200VDC (Automotive Grade)

### Rating and Part Number

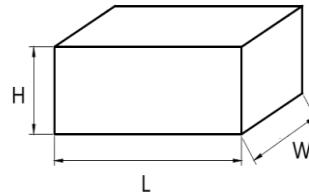
| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current<br>A 70°C | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz | ESL<br>mΩ | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|------|-------------------------|------------|---------|---------|---------|----------|---------------|------------------------|--------------------|---------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|      |                         | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |                        |                    |                                 |           |                     |               |                 |                  |
| 1000 | 8                       | 32         | 37      | 22      | 27.5    | \        | 10.5          | 600                    | 1800               | 10.5                            | 25        | 13.0                | 75            | 0.8             | FDQ3KK805G402GL5 |
| 1000 | 8                       | 32         | 37      | 22      | 27.5    | 10.2     | 13.0          | 600                    | 1800               | 8.8                             | 25        | 10.1                | 75            | 1.0             | FDQ3KK805G404GB5 |
| 1000 | 5                       | 42         | 30      | 17      | 37.5    | \        | 3.8           | 175                    | 525                | 28.0                            | 28        | 37.1                | 35            | 1.0             | FDQ3KK505K662KL5 |
| 1000 | 6                       | 42         | 30      | 17      | 37.5    | \        | 4.5           | 210                    | 630                | 25.0                            | 28        | 29.6                | 35            | 1.0             | FDQ3KK605K662KL5 |
| 1000 | 7                       | 42         | 30      | 17      | 37.5    | \        | 5.0           | 245                    | 735                | 22.0                            | 28        | 27.3                | 35            | 1.0             | FDQ3KK705K662KL5 |
| 1000 | 8                       | 42         | 32      | 19      | 37.5    | \        | 6.0           | 280                    | 840                | 19.5                            | 28        | 21.4                | 35            | 1.0             | FDQ3KK805K212KL5 |
| 1000 | 10                      | 42         | 40      | 20      | 37.5    | 10.2     | 7.5           | 350                    | 1050               | 13.0                            | 30        | 20.5                | 35            | 1.2             | FDQ3KK106K244KB5 |
| 1000 | 12                      | 42         | 37      | 22      | 37.5    | 10.2     | 9.0           | 420                    | 1260               | 11.5                            | 30        | 16.1                | 35            | 1.2             | FDQ3KK126K274KB5 |
| 1000 | 15                      | 42         | 44      | 24      | 37.5    | 10.2     | 11.5          | 525                    | 1575               | 10.0                            | 30        | 11.3                | 35            | 1.2             | FDQ3KK156K324KB5 |
| 1000 | 18                      | 42         | 45      | 30      | 37.5    | 20.3     | 14.0          | 630                    | 1890               | 7.8                             | 30        | 9.8                 | 35            | 1.2             | FDQ3KK186K424KD5 |
| 1000 | 20                      | 42         | 45      | 30      | 37.5    | 20.3     | 15.5          | 700                    | 2100               | 7.0                             | 30        | 8.9                 | 35            | 1.2             | FDQ3KK206K424KD5 |
| 1000 | 25                      | 42         | 50      | 35      | 37.5    | 20.3     | 19.5          | 875                    | 2625               | 5.5                             | 30        | 7.2                 | 35            | 1.2             | FDQ3KK256K474KD5 |
| 1000 | 30                      | 42         | 55      | 40      | 37.5    | 20.3     | 23.0          | 1050                   | 3150               | 4.6                             | 30        | 6.2                 | 35            | 1.2             | FDQ3KK306K494KD5 |
| 1000 | 35                      | 42         | 55      | 40      | 37.5    | 20.3     | 25.0          | 1225                   | 3675               | 4.0                             | 30        | 6.0                 | 35            | 1.2             | FDQ3KK356K494KD5 |
| 1000 | 40                      | 42         | 60      | 45      | 37.5    | 20.3     | 28.5          | 1400                   | 4200               | 3.6                             | 30        | 5.1                 | 35            | 1.2             | FDQ3KK406K524KD5 |
| 1000 | 15                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 5.8           | 300                    | 900                | 19.8                            | 35        | 22.5                | 20            | 1.2             | FDQ3KK156M104MB5 |
| 1000 | 20                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 7.5           | 400                    | 1200               | 13.5                            | 35        | 19.8                | 20            | 1.2             | FDQ3KK206M104MB5 |
| 1000 | 25                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 9.5           | 500                    | 1500               | 11.0                            | 35        | 15.1                | 20            | 1.2             | FDQ3KK256M104MB5 |
| 1000 | 30                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 11.5          | 600                    | 1800               | 9.8                             | 35        | 11.6                | 20            | 1.2             | FDQ3KK306M164MD5 |
| 1000 | 35                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 13.5          | 700                    | 2100               | 8.0                             | 35        | 10.3                | 20            | 1.2             | FDQ3KK356M164MD5 |
| 1000 | 40                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 15.5          | 800                    | 2400               | 7.0                             | 35        | 8.9                 | 20            | 1.2             | FDQ3KK406M204MD5 |
| 1000 | 45                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 17.5          | 900                    | 2700               | 6.2                             | 35        | 7.9                 | 20            | 1.2             | FDQ3KK456M324MD5 |
| 1000 | 50                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 19.5          | 1000                   | 3000               | 5.8                             | 35        | 6.8                 | 20            | 1.2             | FDQ3KK506M324MD5 |
| 1000 | 55                      | 57.5       | 55      | 45      | 52.5    | 20.3     | 21.0          | 1100                   | 3300               | 5.0                             | 35        | 6.8                 | 20            | 1.2             | FDQ3KK556M324MD5 |
| 1000 | 60                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 23.0          | 1200                   | 3600               | 4.6                             | 35        | 6.2                 | 20            | 1.2             | FDQ3KK606M344MD5 |
| 1000 | 65                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 25.0          | 1300                   | 3900               | 4.2                             | 35        | 5.7                 | 20            | 1.2             | FDQ3KK656M344MD5 |
| 1000 | 70                      | 57.5       | 65      | 45      | 52.5    | 20.3     | 27.0          | 1400                   | 4200               | 3.8                             | 35        | 5.4                 | 20            | 1.2             | FDQ3KK706M344MD5 |
| 1100 | 1                       | 32         | 20      | 11      | 27.5    | \        | 2.2           | 80                     | 240                | 65.0                            | 25        | 47.7                | 80            | 0.8             | FDQ3MK105G182GL5 |
| 1100 | 1.5                     | 32         | 22      | 13      | 27.5    | \        | 2.5           | 120                    | 360                | 46.0                            | 25        | 52.2                | 80            | 0.8             | FDQ3MK155G212GL5 |
| 1100 | 2                       | 32         | 24.5    | 13      | 27.5    | \        | 4.8           | 160                    | 480                | 24.5                            | 25        | 26.6                | 80            | 0.8             | FDQ3MK205G222GL5 |
| 1100 | 3                       | 32         | 30      | 16      | 27.5    | \        | 6.5           | 240                    | 720                | 18.5                            | 25        | 19.2                | 80            | 0.8             | FDQ3MK305G322GL5 |
| 1100 | 4                       | 32         | 33      | 18      | 27.5    | \        | 8.5           | 320                    | 960                | 12.5                            | 25        | 16.6                | 80            | 0.8             | FDQ3MK405G342GL5 |
| 1100 | 5                       | 32         | 37      | 22      | 27.5    | \        | 9.8           | 400                    | 1200               | 10.8                            | 25        | 14.5                | 80            | 0.8             | FDQ3MK505G402GL5 |
| 1100 | 5                       | 32         | 37      | 22      | 27.5    | 10.2     | 10.5          | 400                    | 1200               | 10.5                            | 25        | 13.0                | 80            | 1.0             | FDQ3MK505G404GB5 |
| 1100 | 6                       | 32         | 37      | 22      | 27.5    | \        | 10.5          | 480                    | 1440               | 10.5                            | 25        | 13.0                | 80            | 0.8             | FDQ3MK605G402GL5 |
| 1100 | 6                       | 32         | 37      | 22      | 27.5    | 10.2     | 13.0          | 480                    | 1440               | 8.8                             | 25        | 10.1                | 80            | 1.0             | FDQ3MK605G404GB5 |
| 1100 | 3                       | 42         | 30      | 17      | 37.5    | \        | 2.5           | 120                    | 360                | 46.0                            | 28        | 52.2                | 40            | 1.0             | FDQ3MK305K662KL5 |
| 1100 | 4                       | 42         | 30      | 17      | 37.5    | \        | 3.5           | 160                    | 480                | 32.5                            | 28        | 37.7                | 40            | 1.0             | FDQ3MK405K662KL5 |
| 1100 | 4.7                     | 42         | 32      | 19      | 37.5    | \        | 4.0           | 188                    | 564                | 28.0                            | 28        | 33.5                | 40            | 1.0             | FDQ3MK475K212KL5 |
| 1100 | 5                       | 42         | 32      | 19      | 37.5    | \        | 4.2           | 200                    | 600                | 26.0                            | 28        | 32.7                | 40            | 1.0             | FDQ3MK505K212KL5 |
| 1100 | 6                       | 42         | 32      | 19      | 37.5    | \        | 5.0           | 240                    | 720                | 23.5                            | 28        | 25.5                | 40            | 1.0             | FDQ3MK605K212KL5 |
| 1100 | 7                       | 42         | 40      | 20      | 37.5    | 10.2     | 6.0           | 280                    | 840                | 18.5                            | 30        | 22.5                | 40            | 1.2             | FDQ3MK705K244KB5 |
| 1100 | 8                       | 42         | 37      | 22      | 37.5    | 10.2     | 6.5           | 320                    | 960                | 16.5                            | 30        | 21.5                | 40            | 1.2             | FDQ3MK805K274KB5 |
| 1100 | 9                       | 42         | 37      | 22      | 37.5    | 10.2     | 7.5           | 360                    | 1080               | 13.0                            | 30        | 20.5                | 40            | 1.2             | FDQ3MK905K274KB5 |
| 1100 | 10                      | 42         | 44      | 24      | 37.5    | 10.2     | 8.5           | 400                    | 1200               | 12.0                            | 30        | 17.3                | 40            | 1.2             | FDQ3MK106K324KB5 |
| 1100 | 12                      | 42         | 44      | 24      | 37.5    | 10.2     | 10.0          | 480                    | 1440               | 10.8                            | 30        | 13.9                | 40            | 1.2             | FDQ3MK126K324KB5 |
| 1100 | 14                      | 42         | 45      | 30      | 37.5    | 20.3     | 12.0          | 560                    | 1680               | 9.5                             | 30        | 11.0                | 40            | 1.2             | FDQ3MK146K424KD5 |
| 1100 | 15                      | 42         | 45      | 30      | 37.5    | 20.3     | 13.0          | 600                    | 1800               | 8.5                             | 30        | 10.4                | 40            | 1.2             | FDQ3MK156K424KD5 |
| 1100 | 18                      | 42         | 50      | 35      | 37.5    | 20.3     | 15.0          | 720                    | 2160               | 7.0                             | 30        | 9.5                 | 40            | 1.2             | FDQ3MK186K474KD5 |
| 1100 | 20                      | 42         | 50      | 35      | 37.5    | 20.3     | 16.5          | 800                    | 2400               | 6.5                             | 30        | 8.5                 | 40            | 1.2             | FDQ3MK206K474KD5 |
| 1100 | 25                      | 42         | 55      | 40      | 37.5    | 20.3     | 20.5          | 1000                   | 3000               | 5.0                             | 30        | 7.1                 | 40            | 1.2             | FDQ3MK256K494KD5 |
| 1100 | 30                      | 42         | 60      | 45      | 37.5    | 20.3     | 24.5          | 1200                   | 3600               | 4.3                             | 30        | 5.8                 | 40            | 1.2             | FDQ3MK306K524KD5 |
| 1100 | 15                      | 57.5       | 45      | 25      | 52.5    | 10.2     | 6.5           | 300                    | 900                | 16.5                            | 35        | 21.5                | 20            | 1.2             | FDQ3MK156M104MB5 |
| 1100 | 20                      | 57.5       | 45      | 30      | 52.5    | 20.3     | 9.0           | 400                    | 1200               | 11.5                            | 35        | 16.1                | 20            | 1.2             | FDQ3MK206M164MD5 |
| 1100 | 25                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 11.0          | 500                    | 1500               | 10.0                            | 35        | 12.4                | 20            | 1.2             | FDQ3MK256M204MD5 |
| 1100 | 30                      | 57.5       | 50      | 35      | 52.5    | 20.3     | 13.0          | 600                    | 1800               | 8.6                             | 35        | 10.3                | 20            | 1.2             | FDQ3MK306M204MD5 |

### Rating and Part Number

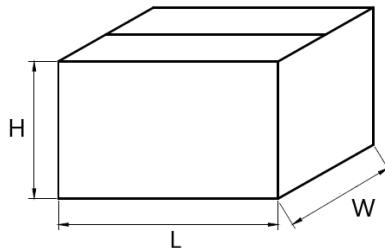
| Vdc  | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|------|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|      |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 1100 | 35              | 57.5       | 55      | 45      | 52.5    | 20.3     | 14.5          | 700          | 2100          | 7.5                             | 35  | 9.5         | 20    | 1.2       | FDQ3MK356M324MD5 |
| 1100 | 40              | 57.5       | 55      | 45      | 52.5    | 20.3     | 16.0          | 800          | 2400          | 6.8                             | 35  | 8.6         | 20    | 1.2       | FDQ3MK406M324MD5 |
| 1100 | 45              | 57.5       | 55      | 45      | 52.5    | 20.3     | 17.5          | 900          | 2700          | 6.2                             | 35  | 7.9         | 20    | 1.2       | FDQ3MK456M324MD5 |
| 1100 | 50              | 57.5       | 65      | 45      | 52.5    | 20.3     | 19.5          | 1000         | 3000          | 5.6                             | 35  | 7.0         | 20    | 1.2       | FDQ3MK506M344MD5 |
| 1100 | 55              | 57.5       | 65      | 45      | 52.5    | 20.3     | 21.5          | 1100         | 3300          | 4.8                             | 35  | 6.8         | 20    | 1.2       | FDQ3MK556M344MD5 |
| 1200 | 1               | 32         | 20      | 11      | 27.5    | \        | 3.5           | 90           | 270           | 35.0                            | 25  | 35.0        | 90    | 0.8       | FDQ3BK105G182GL5 |
| 1200 | 2               | 32         | 24.5    | 15      | 27.5    | \        | 5.0           | 180          | 540           | 24.0                            | 25  | 25.0        | 90    | 0.8       | FDQ3BK205G272GL5 |
| 1200 | 3               | 32         | 30      | 16      | 27.5    | \        | 7.5           | 270          | 810           | 13.0                            | 25  | 20.5        | 90    | 0.8       | FDQ3BK305G322GL5 |
| 1200 | 4               | 32         | 33      | 18      | 27.5    | \        | 9.5           | 360          | 1080          | 11.0                            | 25  | 15.1        | 90    | 0.8       | FDQ3BK405G342GL5 |
| 1200 | 5               | 32         | 37      | 22      | 27.5    | \        | 10.5          | 450          | 1350          | 10.5                            | 25  | 13.0        | 90    | 0.8       | FDQ3BK505G402GL5 |
| 1200 | 5               | 32         | 37      | 22      | 27.5    | 10.2     | 12.0          | 450          | 1350          | 9.5                             | 25  | 11.0        | 90    | 1.0       | FDQ3BK505G404GB5 |
| 1200 | 3               | 42         | 30      | 17      | 37.5    | \        | 3.2           | 135          | 405           | 35.0                            | 28  | 41.9        | 45    | 1.0       | FDQ3BK305K662KL5 |
| 1200 | 4               | 42         | 30      | 17      | 37.5    | \        | 4.2           | 180          | 540           | 28.0                            | 28  | 30.4        | 45    | 1.0       | FDQ3BK405K662KL5 |
| 1200 | 5               | 42         | 32      | 19      | 37.5    | \        | 5.5           | 225          | 675           | 21.5                            | 28  | 23.1        | 45    | 1.0       | FDQ3BK505K212KL5 |
| 1200 | 6               | 42         | 40      | 20      | 37.5    | 10.2     | 6.5           | 270          | 810           | 16.5                            | 30  | 21.5        | 45    | 1.2       | FDQ3BK605K244KB5 |
| 1200 | 7               | 42         | 37      | 22      | 37.5    | 10.2     | 7.5           | 315          | 945           | 13.0                            | 30  | 20.5        | 45    | 1.2       | FDQ3BK705K274KB5 |
| 1200 | 8               | 42         | 44      | 24      | 37.5    | 10.2     | 8.5           | 360          | 1080          | 12.0                            | 30  | 17.3        | 45    | 1.2       | FDQ3BK805K324KB5 |
| 1200 | 9               | 42         | 44      | 24      | 37.5    | 10.2     | 10.0          | 405          | 1215          | 10.8                            | 30  | 13.9        | 45    | 1.2       | FDQ3BK905K324KB5 |
| 1200 | 10              | 42         | 44      | 24      | 37.5    | 10.2     | 11.0          | 450          | 1350          | 10.0                            | 30  | 12.4        | 45    | 1.2       | FDQ3BK106K324KB5 |
| 1200 | 12              | 42         | 45      | 30      | 37.5    | 20.3     | 13.0          | 540          | 1620          | 8.5                             | 30  | 10.4        | 45    | 1.2       | FDQ3BK126K424KD5 |
| 1200 | 15              | 42         | 50      | 35      | 37.5    | 20.3     | 16.0          | 675          | 2025          | 6.8                             | 30  | 8.6         | 45    | 1.2       | FDQ3BK156K474KD5 |
| 1200 | 18              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0          | 810          | 2430          | 6.2                             | 30  | 7.5         | 45    | 1.2       | FDQ3BK186K474KD5 |
| 1200 | 20              | 42         | 55      | 40      | 37.5    | 20.3     | 20.0          | 900          | 2700          | 5.5                             | 30  | 6.8         | 45    | 1.2       | FDQ3BK206K494KD5 |
| 1200 | 25              | 42         | 60      | 45      | 37.5    | 20.3     | 25.0          | 1125         | 3375          | 4.3                             | 30  | 5.6         | 45    | 1.2       | FDQ3BK256K524KD5 |
| 1200 | 12              | 57.5       | 45      | 25      | 52.5    | 10.2     | 6.5           | 300          | 900           | 16.5                            | 35  | 21.5        | 25    | 1.2       | FDQ3BK126M104MB5 |
| 1200 | 15              | 57.5       | 45      | 25      | 52.5    | 10.2     | 7.5           | 375          | 1125          | 13.0                            | 35  | 20.5        | 25    | 1.2       | FDQ3BK156M104MB5 |
| 1200 | 20              | 57.5       | 45      | 30      | 52.5    | 20.3     | 11.0          | 500          | 1500          | 10.0                            | 35  | 12.4        | 25    | 1.2       | FDQ3BK206M164MD5 |
| 1200 | 25              | 57.5       | 50      | 35      | 52.5    | 20.3     | 13.0          | 625          | 1875          | 8.6                             | 35  | 10.3        | 25    | 1.2       | FDQ3BK256M204MD5 |
| 1200 | 30              | 57.5       | 55      | 45      | 52.5    | 20.3     | 14.5          | 750          | 2250          | 7.5                             | 35  | 9.5         | 25    | 1.2       | FDQ3BK306M324MD5 |
| 1200 | 35              | 57.5       | 55      | 45      | 52.5    | 20.3     | 16.0          | 875          | 2625          | 6.8                             | 35  | 8.6         | 25    | 1.2       | FDQ3BK356M324MD5 |
| 1200 | 40              | 57.5       | 65      | 45      | 52.5    | 20.3     | 20.0          | 1000         | 3000          | 5.5                             | 35  | 6.8         | 25    | 1.2       | FDQ3BK406M344MD5 |
| 1200 | 45              | 57.5       | 65      | 45      | 52.5    | 20.3     | 22.5          | 1125         | 3375          | 4.8                             | 35  | 6.2         | 25    | 1.2       | FDQ3BK456M344MD5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |    | Packaging Quantity |             |
|-------|-----------|-----------|------|----|--------------------|-------------|
|       |           | W         | H    | T  | Long Leads         | Short Leads |
| 27.5  | G15       | 32        | 18   | 9  | 340                | 340         |
|       | G18       | 32        | 20   | 11 | 280                | 280         |
|       | G21       | 32        | 22   | 13 | 230                | 230         |
|       | G22       | 32        | 24.5 | 13 | 230                | 230         |
|       | G26       | 32        | 28   | 14 | 220                | 220         |
|       | G27       | 32        | 24.5 | 15 | 200                | 200         |
|       | G32       | 32        | 30   | 16 | 190                | 190         |
|       | G34       | 32        | 33   | 18 | 170                | 170         |
|       | G40       | 32        | 37   | 22 | 140                | 140         |
| 37.5  | K21       | 42        | 32   | 19 | 112                | 112         |
|       | K24       | 42        | 40   | 20 | 105                | 105         |
|       | K27       | 42        | 37   | 22 | 98                 | 98          |
|       | K32       | 42        | 44   | 24 | 91                 | 91          |
|       | K37       | 42        | 37   | 28 | 77                 | 77          |
|       | K39       | 42        | 43   | 28 | 77                 | 77          |
|       | K42       | 42        | 45   | 30 | 70                 | 70          |
|       | K47       | 42        | 50   | 35 | 63                 | 63          |
|       | K49       | 42        | 55   | 40 | 49                 | 49          |
|       | K52       | 42        | 60   | 45 | 49                 | 49          |
| 52.5  | K66       | 42        | 30   | 17 | 126                | 126         |
|       | M10       | 57.5      | 45   | 25 | 60                 | 60          |
|       | M16       | 57.5      | 45   | 30 | 50                 | 50          |
|       | M20       | 57.5      | 50   | 35 | 45                 | 45          |
|       | M23       | 57.5      | 65   | 35 | 45                 | 45          |
|       | M32       | 57.5      | 55   | 45 | 35                 | 35          |
|       | M34       | 57.5      | 65   | 45 | 35                 | 35          |

## Overview

The FDB capacitor is constructed of metallized polypropylene film in cylindrical plastic case and filled with epoxy resin.

## Features

- Self-healing
- Low inductance
- High capacitance density
- Low ESR and high ripple current handling capability
- Long lifetime and can replace bank of series-connected electrolytic capacitors

## Applications

Widely used in DC Link, high performance DC filtering, motor drive systems, welder, elevator, EV/HEV.



## Qualification

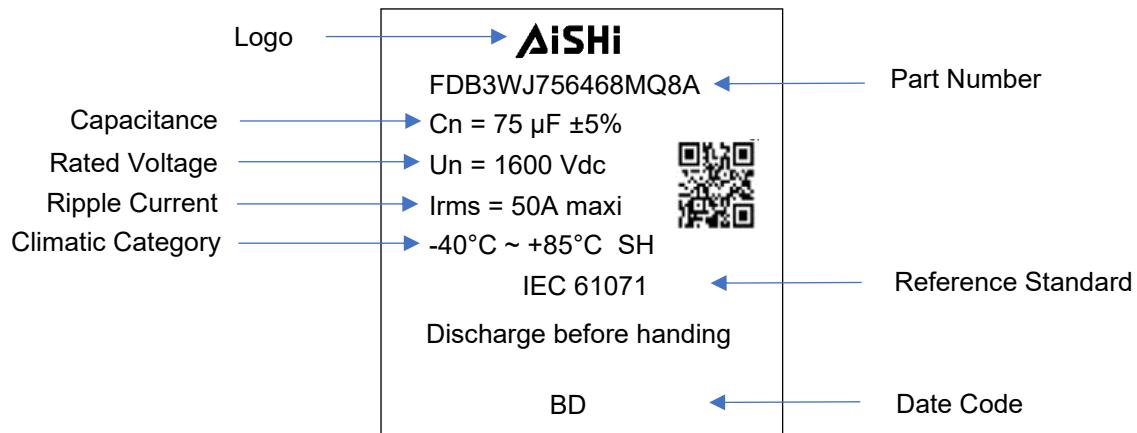
|                    |                      |
|--------------------|----------------------|
| Reference Standard | IEC 61071            |
| Climate Category   | 40/85/56 IEC 60068-1 |



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film              |
| Voltage Range               | 500Vdc to 1100Vdc                          |
| Capacitance Range           | 50µF to 280µF                              |
| Capacitance Tolerance       | ±5% or ±10% at +25°C                       |
| Operating Temperature Range | -40°C ~ +85°C                              |
| Climatic Category           | 40/85/56 IEC 60068-1                       |
| Dissipation Factor          | ≤0.0020 at 1KHz                            |
| Insulation Resistance       | IR x C ≥10,000s at 100VDC 1minute at +25°C |

## Marking



## Part Number System

| <b>F</b>       | <b>DB</b>   | <b>3W</b>  | <b>J</b>            | <b>756</b>  | <b>468</b>               | <b>MQ8</b>                   | <b>A</b>                            |
|----------------|---|--|---------------------|---|--------------------------|------------------------------|-------------------------------------|
| Capacitor Type | Series  | Voltage (VDC)                                    | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Terminal Length Code                |
| F = Film       | DC Link, Cylindrical Plastic Case, Metallized PP Film | 500=2H<br>600=2K<br>800=2N<br>1000=3K<br>1100=3M | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Terminal Length Code Table |

## Size Code Table

| Digit One<br>Case Diameter: D |   | Digit Two and Three<br>Case Height: H |    |
|-------------------------------|---|---------------------------------------|----|
| 85mm                          | 4 | 40mm                                  | 40 |
|                               |   | 51mm                                  | 51 |
|                               |   | 64mm                                  | 64 |
|                               |   | 76mm                                  | 76 |

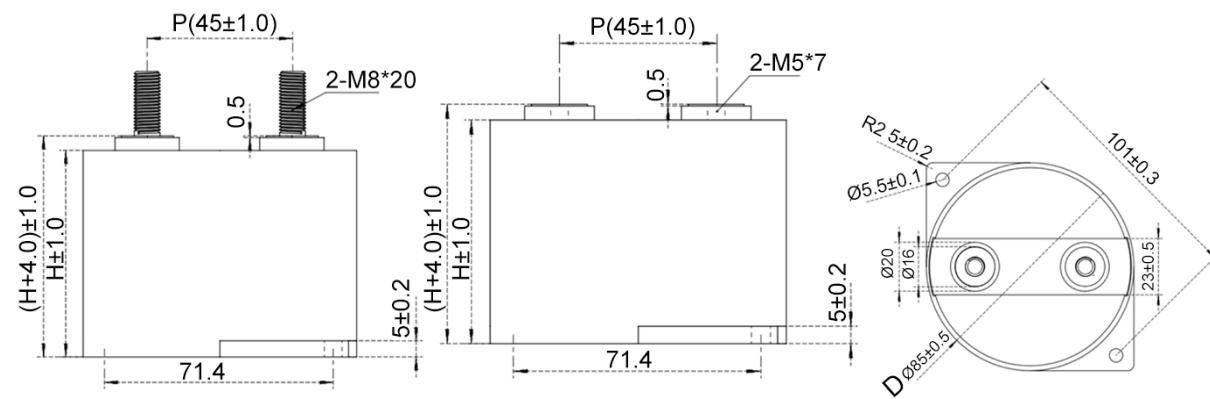
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Terminal Space) |   | Digit Three<br>(Terminal Size) |   |
|-----------------------------------|---|-------------------------------|---|--------------------------------|---|
| Male Terminal                     | M | 45.0mm                        | Q | M5                             | 5 |
| Female Terminal                   | F | N/A                           | N | M6                             | 6 |
|                                   |   |                               |   | M8                             | 8 |
|                                   |   |                               |   |                                |   |
|                                   |   |                               |   |                                |   |

## Lead Length Code

| Terminal Length |   |
|-----------------|---|
| 5mm             | 5 |
| 6mm             | 6 |
| 7mm             | 7 |
| 20mm            | A |
| N/A             | N |

### Outline Drawing (mm)



### Rating and Part Number

#### Male Terminal

| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |         |         | Irms<br>10KHz | Peak Current<br>A (50°C) | Surge Current<br>A | ESR 1KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Pkg Qty<br>pcs | Part Number      |
|------|-------------------------|------------|---------|---------|---------------|--------------------------|--------------------|----------------|-----------|---------------------|---------------|----------------|------------------|
|      |                         | D<br>mm    | H<br>mm | P<br>mm |               |                          |                    |                |           |                     |               |                |                  |
| 500  | 150                     | 85         | 40      | 45      | 65            | 5,250                    | 15,750             | 1.8            | 25        | 4.3                 | 35            | 8              | FDB2HK157440MQ8A |
| 500  | 220                     | 85         | 51      | 45      | 65            | 5,500                    | 16,500             | 1.8            | 40        | 4.8                 | 25            | 8              | FDB2HK227451MQ8A |
| 500  | 280                     | 85         | 64      | 45      | 70            | 5,600                    | 16,800             | 1.6            | 40        | 5.4                 | 20            | 8              | FDB2HK287464MQ8A |
| 600  | 100                     | 85         | 40      | 45      | 70            | 3,500                    | 10,500             | 1.5            | 25        | 5.0                 | 35            | 8              | FDB2KK107440MQ8A |
| 600  | 150                     | 85         | 51      | 45      | 80            | 3,750                    | 11,250             | 1.4            | 30        | 6.5                 | 25            | 8              | FDB2KK157451MQ8A |
| 600  | 220                     | 85         | 64      | 45      | 90            | 4,400                    | 13,200             | 1.5            | 40        | 4.5                 | 20            | 8              | FDB2KK227464MQ8A |
| 800  | 66                      | 85         | 40      | 45      | 70            | 2,310                    | 6,930              | 2.0            | 25        | 5.0                 | 35            | 8              | FDB2NK666440MQ8A |
| 800  | 100                     | 85         | 51      | 45      | 75            | 2,500                    | 7,500              | 1.8            | 30        | 5.0                 | 25            | 8              | FDB2NK107451MQ8A |
| 800  | 140                     | 85         | 64      | 45      | 80            | 2,800                    | 8,400              | 1.6            | 40        | 8.4                 | 20            | 8              | FDB2NK147464MQ8A |
| 800  | 220                     | 85         | 64      | 45      | 100           | 4,400                    | 13,200             | 1.4            | 40        | 4.8                 | 20            | 8              | FDB2NK227464MQ8A |
| 1000 | 66                      | 85         | 40      | 45      | 70            | 2,310                    | 6,930              | 1.0            | 25        | 4.2                 | 35            | 8              | FDB3KK666440MQ8A |
| 1000 | 120                     | 85         | 51      | 45      | 85            | 3,000                    | 9,000              | 2.2            | 30        | 5.2                 | 25            | 8              | FDB3KK127451MQ8A |
| 1000 | 140                     | 85         | 64      | 45      | 100           | 2,800                    | 8,400              | 1.5            | 40        | 3.1                 | 20            | 8              | FDB3KK147464MQ8A |
| 1100 | 50                      | 85         | 40      | 45      | 55            | 1,750                    | 5,250              | 2.4            | 30        | 4.5                 | 35            | 8              | FDB3MK506440MQ8A |
| 1100 | 100                     | 85         | 51      | 45      | 55            | 2,500                    | 7,500              | 2.0            | 30        | 4.5                 | 25            | 8              | FDB3MK107451MQ8A |

## Rating and Part Number

Female Terminal

| Vdc  | Cap Value<br>μF | Dimensions |         |         | Irms<br>10KHz | Peak Current | Surge Current | ESR<br>1KHz | ESL | Thermal Res<br>°C/W | dv/dt<br>V/us | Pkg Qty<br>pcs | Part Number      |
|------|-----------------|------------|---------|---------|---------------|--------------|---------------|-------------|-----|---------------------|---------------|----------------|------------------|
|      |                 | D<br>mm    | H<br>mm | P<br>mm |               |              |               |             |     |                     |               |                |                  |
|      |                 | mm         | mm      | mm      | A (50°C)      | A            | A             | mΩ          | nH  | V/us                | pcs           |                |                  |
| 500  | 150             | 85         | 40      | 45      | 65.0          | 5,250        | 15,750        | 1.8         | 25  | 4.3                 | 35            | 8              | FDB2HK157440FQ55 |
| 500  | 220             | 85         | 51      | 45      | 65.0          | 5,500        | 16,500        | 1.8         | 40  | 4.8                 | 25            | 8              | FDB2HK227451FQ55 |
| 500  | 280             | 85         | 64      | 45      | 70.0          | 5,600        | 16,800        | 1.6         | 40  | 5.4                 | 20            | 8              | FDB2HK287464FQ55 |
| 600  | 100             | 85         | 40      | 45      | 70.0          | 3,500        | 10,500        | 1.5         | 25  | 5.0                 | 35            | 8              | FDB2KK107440FQ55 |
| 600  | 150             | 85         | 51      | 45      | 80.0          | 3,750        | 11,250        | 1.4         | 30  | 6.5                 | 25            | 8              | FDB2KK157451FQ55 |
| 600  | 220             | 85         | 64      | 45      | 90.0          | 4,400        | 13,200        | 1.5         | 40  | 4.5                 | 20            | 8              | FDB2KK227464FQ55 |
| 800  | 66              | 85         | 40      | 45      | 70.0          | 2,310        | 6,930         | 2.0         | 25  | 5.0                 | 35            | 8              | FDB2NK666440FQ55 |
| 800  | 100             | 85         | 51      | 45      | 75.0          | 2,500        | 7,500         | 1.8         | 30  | 5.0                 | 25            | 8              | FDB2NK107451FQ55 |
| 800  | 140             | 85         | 64      | 45      | 80.0          | 2,800        | 8,400         | 1.6         | 40  | 8.4                 | 20            | 8              | FDB2NK147464FQ55 |
| 800  | 220             | 85         | 64      | 45      | 100.0         | 4,400        | 13,200        | 1.4         | 40  | 4.8                 | 20            | 8              | FDB2NK227464FQ55 |
| 1000 | 66              | 85         | 40      | 45      | 70.0          | 2,310        | 6,930         | 1.0         | 25  | 4.2                 | 35            | 8              | FDB3KK666440FQ55 |
| 1000 | 120             | 85         | 51      | 45      | 85.0          | 3,000        | 9,000         | 2.2         | 30  | 5.2                 | 25            | 8              | FDB3KK127451FQ55 |
| 1000 | 140             | 85         | 64      | 45      | 100.0         | 2,800        | 8,400         | 1.5         | 40  | 3.1                 | 20            | 8              | FDB3KK147464FQ55 |
| 1100 | 50              | 85         | 40      | 45      | 55.0          | 1,750        | 5,250         | 2.4         | 30  | 4.5                 | 35            | 8              | FDB3MK506440FQ55 |
| 1100 | 100             | 85         | 51      | 45      | 55.0          | 2,500        | 7,500         | 2.0         | 30  | 4.5                 | 25            | 8              | FDB3MK107451FQ55 |

## Packaging Information

Capacitors are well protected by foams. And then are packaged in the cartons.

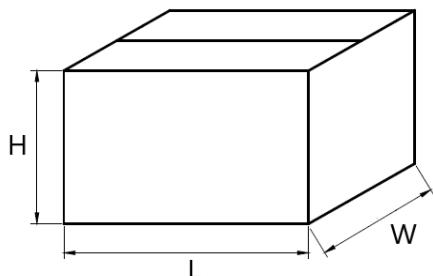


Table 1 carton dimensions

| Carton No. | L (mm) | W (mm) | H (mm) |
|------------|--------|--------|--------|
| 1          | 375    | 285    | 235    |
| 2          | 375    | 285    | 300    |
| 3          | 375    | 285    | 330    |
| 4          | 375    | 285    | 365    |
| 5          | 375    | 285    | 265    |

Every carton contains capacitors as per the following Table 2.

Table 2 Capacitor quantity of each carton

| Capacitor Diameter (mm) | Quantity (pcs) |
|-------------------------|----------------|
| 85                      | 24             |

## Overview

The FDC capacitor is constructed of metallized polypropylene film in cylindrical aluminum can with stud and filled with epoxy resin. These FDC is specially design for application in high power conversion which required high capacitance with high reliability.

## Applications

Widely used in high performance DC filtering, solar inverter, wind power and energy storage. Suitable for centralized inverter systems and can replace bank of series-connected electrolytic capacitors.

## Features

- Self-healing
- High capacitance density
- High ripple current and low loss
- Long lifetime
- Can replace bank of series-connected electrolytic capacitors
- THB Grade IIIB available on request.



## Applicable Standard

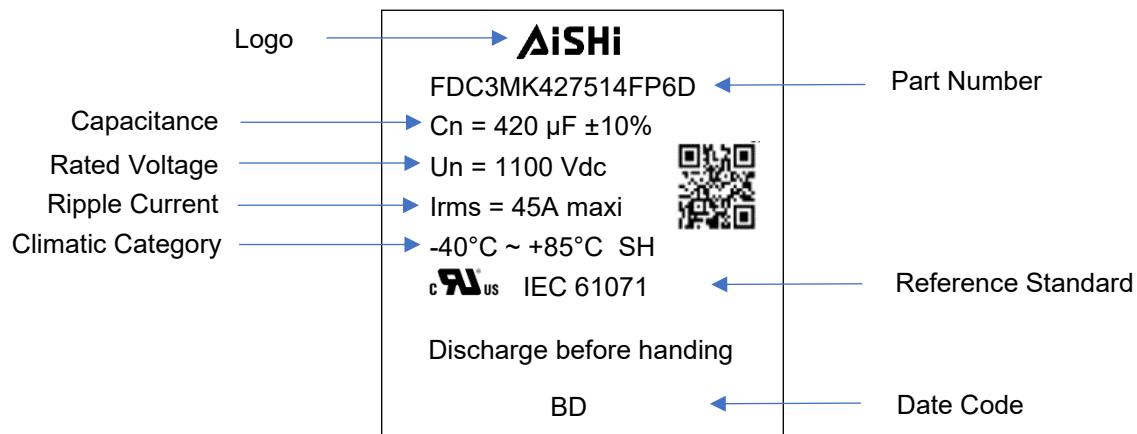
| Approval | Specification                 | File Number |
|----------|-------------------------------|-------------|
|          | UL 810<br>(Construction Only) | E500537     |



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film              |
| Voltage Range               | 600Vdc to 4000Vdc                          |
| Capacitance Range           | 24μF to 5600μF                             |
| Capacitance Tolerance       | ±5% or ±10% at +25°C                       |
| Operating Temperature Range | -40°C ~ +85°C                              |
| Climatic Category           | 40/85/56 IEC 60068-1                       |
| Dissipation Factor          | ≤0.0020 at 100Hz                           |
| Insulation Resistance       | IR x C ≥10,000s at 100VDC 1minute at +25°C |

## Marking



## Part Number System

| <b>F</b>       | <b>DC</b>  | <b>3M</b>   | <b>K</b>  | <b>427</b>  | <b>514</b>               | <b>FP6</b>                   | <b>D</b>                        |
|----------------|--|---|---|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series   | Voltage (VDC)   | Tolerance   | Capacitance (pF)  | Size Code                | Terminal Code                | Bottom Stud Code                |
| F = Film       | DC Link,<br>Cylindrical<br>Aluminum<br>Can Dry<br>Type,<br>Metallized<br>PP Film | 600=2K<br>700=2M<br>800=2N<br>900=2Q<br>1000=3K<br>1100=3M<br>1200=3B<br>1300=3S<br>1500=3U<br>1750=3Q<br>2000=3D<br>2200=3C<br>2400=4A<br>2600=4B<br>2800=4C<br>3000=3F<br>3200=4D<br>3600=4E<br>4000=3G | J = ±5%<br>K = ±10%<br>H = ±3%<br>A = -5% ~ +10%<br>B = 0 ~ +5%<br>C = -15% ~ 0<br>D = 0 ~ +10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Bottom Stud Code Table |

## Terminal Code

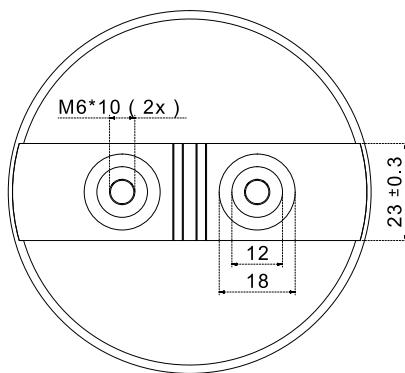
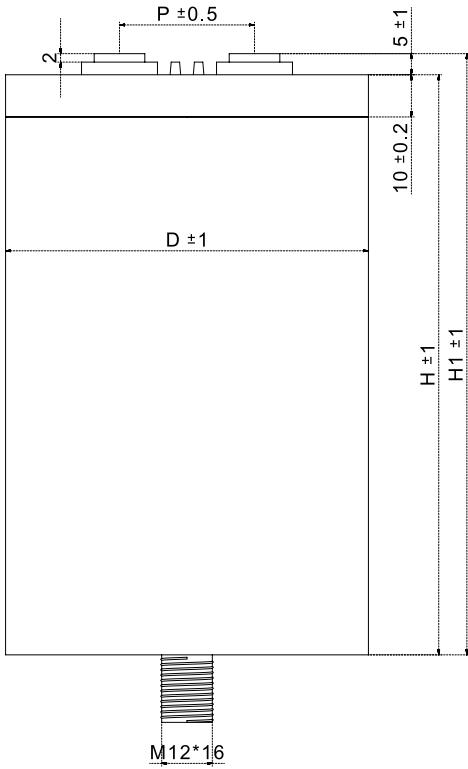
| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Terminal Space) |   | Digit Three<br>(Terminal Size) |   |
|-----------------------------------|---|-------------------------------|---|--------------------------------|---|
| Male Terminal                     | M | 32.0mm                        | P | M5                             | 5 |
| Female Terminal                   | F | 35.0mm                        | X | M6                             | 6 |
|                                   |   | 45.0mm                        | Q | M8                             | 8 |
|                                   |   | 50.0mm                        | R |                                |   |
|                                   |   | N/A                           | N |                                |   |

## Lead Length Code

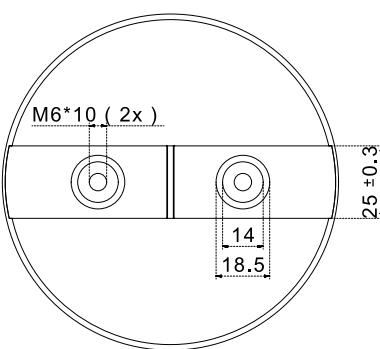
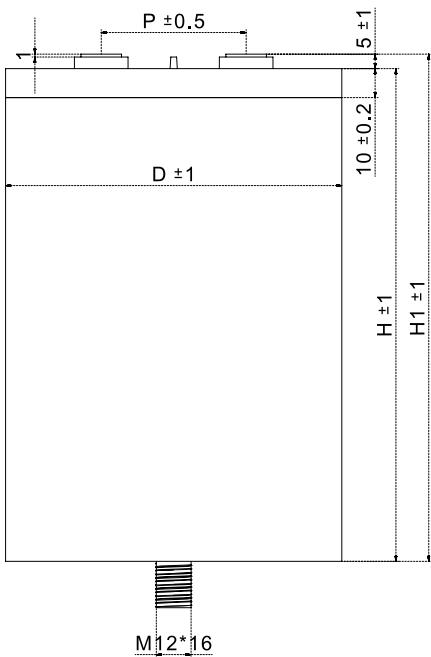
| Bottom Stud    |   |
|----------------|---|
| Bottom M8*10   | C |
| Bottom M12*16  | D |
| No Bottom Stud | E |
|                |   |
|                |   |

### Dimension (mm)

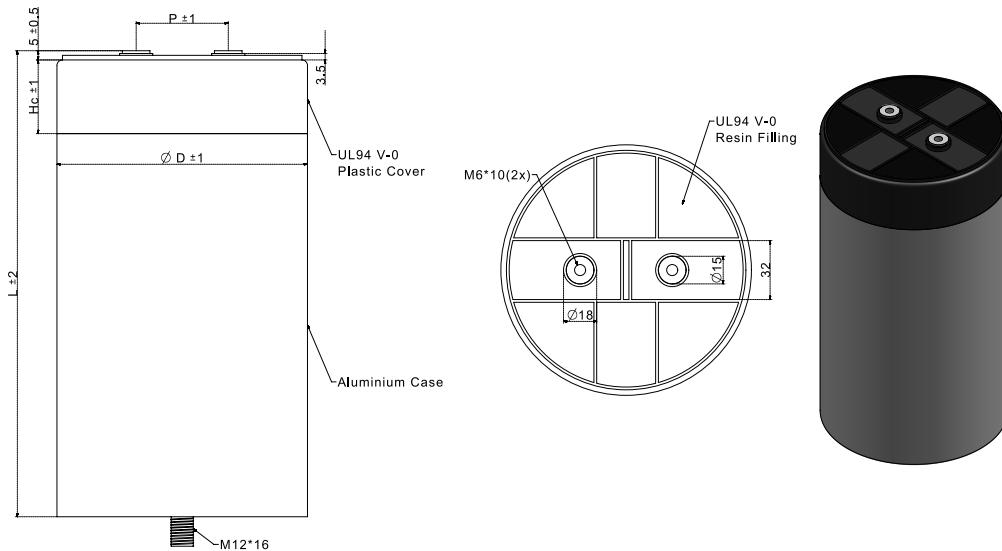
Diameter 76mm, 86mm



Diameter 116mm



Diameter 136mm



### Size Code Table

| Size Code | Dimension |       |      |       |        |      |
|-----------|-----------|-------|------|-------|--------|------|
|           | D±1       | H1±1  | P±1  | d±0.3 | d1±0.3 | h±1  |
| 380       | 75.0      | 80.0  | 32.0 | 12.0  | 15.0   | 30.0 |
| 310       | 75.0      | 105.0 | 32.0 | 12.0  | 15.0   | 30.0 |
| 580       | 86.0      | 80.0  | 32.0 | 12.0  | 15.0   | 30.0 |
| 510       | 86.0      | 105.0 | 32.0 | 12.0  | 15.0   | 30.0 |
| 512       | 86.0      | 126.0 | 32.0 | 12.0  | 15.0   | 30.0 |
| 514       | 86.0      | 142.5 | 32.0 | 12.0  | 15.0   | 30.0 |
| 515       | 86.0      | 151.0 | 32.0 | 12.0  | 15.0   | 30.0 |
| 516       | 86.0      | 161.0 | 32.0 | 12.0  | 15.0   | 30.0 |
| 517       | 86.0      | 178.5 | 32.0 | 12.0  | 15.0   | 30.0 |
| 518       | 86.0      | 180.0 | 32.0 | 12.0  | 15.0   | 30.0 |
| 520       | 86.0      | 205.0 | 32.0 | 12.0  | 15.0   | 30.0 |
| 522       | 86.0      | 225.0 | 32.0 | 12.0  | 15.0   | 30.0 |
| A15       | 100.0     | 155.0 | 32.0 | 15.0  | 18.0   | 40.0 |
| A18       | 100.0     | 180.0 | 32.0 | 15.0  | 18.0   | 40.0 |
| 910       | 116.0     | 105.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 915       | 116.0     | 155.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 916       | 116.0     | 161.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 917       | 116.0     | 170.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 918       | 116.0     | 180.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 920       | 116.0     | 205.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 923       | 116.0     | 235.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 924       | 116.0     | 240.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 926       | 116.0     | 265.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 929       | 116.0     | 290.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 933       | 116.0     | 330.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 934       | 116.0     | 340.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 023       | 136.0     | 235.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 026       | 136.0     | 265.0 | 50.0 | 15.0  | 18.0   | 40.0 |
| 034       | 136.0     | 340.0 | 50.0 | 15.0  | 18.0   | 40.0 |

## Rating and Part Number

| Vdc | Cap Value $\mu\text{F}$ | Dimensions |     |          | Irms  | Peak    | ESR  | ESL | Thermal | dv/dt | Pkg Qty | Part Number      |
|-----|-------------------------|------------|-----|----------|-------|---------|------|-----|---------|-------|---------|------------------|
|     |                         | D          | H1  | P        | 10KHz | Current | 1KHz |     | Res     |       |         |                  |
| mm  | mm                      | mm         | mm  | A (50°C) | A     | mΩ      | nH   |     |         |       |         |                  |
| 600 | 480                     | 75         | 101 | 32       | 65    | 1560    | 1.5  | 45  | 5.5     | 3.3   | 12      | FDC2KK487310FP6D |
| 600 | 650                     | 75         | 126 | 32       | 62    | 1560    | 1.9  | 50  | 4.7     | 2.4   | 12      | FDC2KK657312FP6D |
| 600 | 800                     | 75         | 146 | 32       | 60    | 1600    | 2.0  | 55  | 4.6     | 2.0   | 12      | FDC2KK807314FP6D |
| 600 | 950                     | 75         | 180 | 32       | 70    | 3200    | 1.5  | 45  | 4.2     | 3.4   | 12      | FDC2KK957318FP6D |
| 600 | 650                     | 86         | 101 | 32       | 70    | 2200    | 1.2  | 45  | 5.1     | 3.4   | 8       | FDC2KK657510FP6D |
| 600 | 880                     | 86         | 126 | 32       | 70    | 2100    | 1.5  | 50  | 4.7     | 2.4   | 8       | FDC2KK887512FP6D |
| 600 | 1000                    | 86         | 142 | 32       | 65    | 2430    | 1.0  | 55  | 4.6     | 2.4   | 8       | FDC2KK108514FP6D |
| 600 | 1100                    | 86         | 146 | 32       | 66    | 2160    | 1.7  | 55  | 4.6     | 2.0   | 8       | FDC2KK118514FP6D |
| 600 | 1100                    | 86         | 161 | 32       | 70    | 4200    | 1.4  | 40  | 4.3     | 3.8   | 8       | FDC2KK118516FP6D |
| 600 | 1300                    | 86         | 180 | 32       | 70    | 4200    | 1.4  | 45  | 4.3     | 3.2   | 8       | FDC2KK138518FP6D |
| 600 | 2000                    | 86         | 260 | 32       | 70    | 6500    | 1.1  | 55  | 3.0     | 3.3   | 8       | FDC2KK208526FP6D |
| 600 | 900                     | 96         | 101 | 50       | 70    | 2900    | 1.3  | 45  | 4.7     | 3.2   | 6       | FDC2KK907610FR6D |
| 600 | 1200                    | 96         | 126 | 50       | 70    | 2900    | 1.4  | 50  | 4.1     | 2.4   | 6       | FDC2KK128612FR6D |
| 600 | 1400                    | 96         | 141 | 50       | 70    | 2890    | 1.5  | 55  | 3.9     | 2.1   | 6       | FDC2KK148614FR6D |
| 600 | 1500                    | 96         | 146 | 50       | 70    | 2850    | 1.6  | 55  | 3.8     | 1.9   | 6       | FDC2KK158614FR6D |
| 600 | 1600                    | 96         | 161 | 50       | 70    | 6000    | 1.0  | 40  | 3.5     | 3.8   | 6       | FDC2KK168616FR6D |
| 600 | 1800                    | 96         | 180 | 50       | 70    | 6000    | 1.0  | 45  | 3.2     | 3.3   | 6       | FDC2KK188618FR6D |
| 600 | 1200                    | 116        | 101 | 50       | 80    | 4000    | 0.7  | 45  | 5.4     | 3.3   | 5       | FDC2KK128910FR6D |
| 600 | 1600                    | 116        | 126 | 50       | 80    | 4000    | 1.0  | 50  | 5.0     | 2.5   | 5       | FDC2KK168912FR6D |
| 600 | 2000                    | 116        | 146 | 50       | 80    | 4000    | 1.1  | 55  | 4.9     | 2.0   | 5       | FDC2KK208914FR6D |
| 600 | 2100                    | 116        | 161 | 50       | 100   | 8000    | 0.8  | 40  | 3.6     | 3.8   | 5       | FDC2KK218916FR6D |
| 600 | 2400                    | 116        | 180 | 50       | 100   | 8000    | 0.9  | 45  | 3.4     | 3.3   | 5       | FDC2KK248918FR6D |
| 600 | 3000                    | 116        | 230 | 50       | 100   | 11200   | 0.8  | 50  | 2.7     | 3.7   | 5       | FDC2KK308923FR6D |
| 600 | 5600                    | 136        | 270 | 50       | 100   | 16000   | 0.8  | 60  | 2.0     | 2.9   | 2       | FDC2KK568027FR6D |
| 700 | 360                     | 75         | 101 | 32       | 62    | 1560    | 1.6  | 45  | 5.6     | 4.3   | 12      | FDC2MK367310FP6D |
| 700 | 480                     | 75         | 126 | 32       | 59    | 1530    | 2.1  | 50  | 4.7     | 3.2   | 12      | FDC2MK487312FP6D |
| 700 | 580                     | 75         | 146 | 32       | 56    | 1530    | 2.4  | 55  | 4.6     | 2.6   | 12      | FDC2MK587314FP6D |
| 700 | 620                     | 75         | 161 | 32       | 70    | 3000    | 1.5  | 40  | 4.3     | 4.8   | 12      | FDC2MK627316FP6D |
| 700 | 720                     | 75         | 180 | 32       | 70    | 3200    | 1.6  | 45  | 4.2     | 4.4   | 12      | FDC2MK727318FP6D |
| 700 | 480                     | 86         | 101 | 32       | 70    | 2100    | 1.3  | 45  | 5.1     | 4.4   | 8       | FDC2MK487510FP6D |
| 700 | 650                     | 86         | 126 | 32       | 66    | 2100    | 1.7  | 50  | 4.7     | 3.2   | 8       | FDC2MK657512FP6D |
| 700 | 750                     | 86         | 141 | 32       | 61    | 2100    | 2.0  | 55  | 4.7     | 2.8   | 8       | FDC2MK757514FP6D |
| 700 | 780                     | 86         | 146 | 32       | 63    | 2100    | 1.9  | 55  | 4.6     | 2.7   | 8       | FDC2MK787514FP6D |
| 700 | 820                     | 86         | 161 | 32       | 70    | 4100    | 1.4  | 40  | 4.4     | 5.0   | 8       | FDC2MK827516FP6D |
| 700 | 950                     | 86         | 180 | 32       | 70    | 4100    | 1.5  | 45  | 4.3     | 4.3   | 8       | FDC2MK957518FP6D |
| 700 | 1500                    | 86         | 260 | 32       | 70    | 6500    | 1.1  | 55  | 3.0     | 4.3   | 8       | FDC2MK158526FP6D |
| 700 | 650                     | 96         | 101 | 50       | 69    | 2700    | 1.4  | 45  | 4.7     | 4.2   | 6       | FDC2MK657610FR6D |
| 700 | 900                     | 96         | 126 | 50       | 69    | 2700    | 1.5  | 50  | 4.1     | 3.0   | 6       | FDC2MK907612FR6D |
| 700 | 1000                    | 96         | 141 | 50       | 67    | 2700    | 1.7  | 55  | 3.9     | 2.7   | 6       | FDC2MK108614FR6D |
| 700 | 1100                    | 96         | 146 | 50       | 68    | 2800    | 1.7  | 55  | 3.8     | 2.5   | 6       | FDC2MK118614FR6D |
| 700 | 1100                    | 96         | 161 | 50       | 68    | 5200    | 1.0  | 40  | 3.5     | 4.7   | 6       | FDC2MK118616FR6D |
| 700 | 1300                    | 96         | 180 | 50       | 70    | 5500    | 1.1  | 45  | 3.2     | 4.2   | 6       | FDC2MK138618FR6D |
| 700 | 920                     | 116        | 101 | 50       | 80    | 4000    | 0.7  | 45  | 5.4     | 4.3   | 5       | FDC2MK927910FR6D |
| 700 | 1200                    | 116        | 126 | 50       | 80    | 4000    | 1.0  | 50  | 5.0     | 3.3   | 5       | FDC2MK128912FR6D |
| 700 | 1500                    | 116        | 161 | 50       | 80    | 4000    | 1.1  | 55  | 4.9     | 2.7   | 5       | FDC2MK158916FR6D |
| 700 | 1800                    | 116        | 180 | 50       | 100   | 7800    | 1.0  | 40  | 3.4     | 4.3   | 5       | FDC2MK188918FR6D |
| 700 | 2300                    | 116        | 230 | 50       | 100   | 11500   | 0.8  | 50  | 2.7     | 5.0   | 5       | FDC2MK238923FR6D |
| 700 | 4200                    | 136        | 270 | 50       | 100   | 16000   | 0.8  | 60  | 2.0     | 3.8   | 2       | FDC2MK428027FR6D |

## Rating and Part Number

| Vdc | Cap Value $\mu\text{F}$ | Dimensions |          |         | Irms 10KHz<br>A (50°C) | Peak Current<br>A | ESR 1KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Pkg Qty<br>pcs | Part Number      |
|-----|-------------------------|------------|----------|---------|------------------------|-------------------|----------------|-----------|---------------------|---------------|----------------|------------------|
|     |                         | D<br>mm    | H1<br>mm | P<br>mm |                        |                   |                |           |                     |               |                |                  |
| 800 | 290                     | 75         | 101      | 32      | 60                     | 1500              | 1.7            | 45        | 5.6                 | 10.5          | 12             | FDC2NK297310FP6D |
| 800 | 400                     | 75         | 126      | 32      | 58                     | 1560              | 2.2            | 50        | 4.7                 | 3.9           | 12             | FDC2NK407312FP6D |
| 800 | 480                     | 75         | 146      | 32      | 55                     | 1560              | 2.5            | 55        | 4.6                 | 3.3           | 12             | FDC2NK487314FP6D |
| 800 | 480                     | 75         | 161      | 32      | 70                     | 1560              | 1.6            | 40        | 4.3                 | 3.3           | 12             | FDC2NK487316FP6D |
| 800 | 560                     | 75         | 180      | 32      | 70                     | 3000              | 1.7            | 45        | 4.2                 | 5.4           | 12             | FDC2NK567318FP6D |
| 800 | 520                     | 86         | 126      | 32      | 64                     | 2000              | 1.8            | 50        | 4.7                 | 3.8           | 8              | FDC2NK527512FP6D |
| 800 | 580                     | 86         | 142      | 32      | 61                     | 2000              | 2.0            | 55        | 4.6                 | 3.4           | 8              | FDC2NK587514FP6D |
| 800 | 630                     | 86         | 146      | 32      | 60                     | 2000              | 2.1            | 55        | 4.6                 | 3.2           | 8              | FDC2NK637514FP6D |
| 800 | 650                     | 86         | 161      | 32      | 70                     | 3000              | 1.5            | 40        | 4.4                 | 4.6           | 8              | FDC2NK657516FP6D |
| 800 | 750                     | 86         | 180      | 32      | 70                     | 4000              | 1.6            | 45        | 4.3                 | 5.3           | 8              | FDC2NK757518FP6D |
| 800 | 1100                    | 86         | 260      | 32      | 70                     | 4000              | 1.2            | 55        | 3.0                 | 3.6           | 8              | FDC2NK118526FP6D |
| 800 | 500                     | 96         | 101      | 50      | 67                     | 2620              | 1.4            | 45        | 4.7                 | 5.2           | 8              | FDC2NK507610FR6D |
| 800 | 700                     | 96         | 126      | 50      | 67                     | 2700              | 1.6            | 50        | 4.1                 | 3.9           | 6              | FDC2NK707612FR6D |
| 800 | 800                     | 96         | 141      | 50      | 66                     | 2700              | 1.8            | 55        | 3.9                 | 3.4           | 6              | FDC2NK807614FR6D |
| 800 | 850                     | 96         | 146      | 50      | 66                     | 2700              | 1.8            | 55        | 3.8                 | 3.2           | 6              | FDC2NK857614FR6D |
| 800 | 900                     | 96         | 161      | 50      | 70                     | 5400              | 1.1            | 40        | 3.5                 | 6.0           | 6              | FDC2NK907616FR6D |
| 800 | 1000                    | 96         | 180      | 50      | 70                     | 5300              | 1.1            | 45        | 3.2                 | 5.3           | 6              | FDC2NK108618FR6D |
| 800 | 720                     | 116        | 101      | 50      | 80                     | 3800              | 0.8            | 45        | 5.4                 | 5.3           | 5              | FDC2NK727910FR6D |
| 800 | 1000                    | 116        | 126      | 50      | 79                     | 4000              | 1.1            | 60        | 5.0                 | 7.0           | 5              | FDC2NK108912FR6D |
| 800 | 1200                    | 116        | 146      | 50      | 77                     | 4000              | 1.2            | 55        | 4.9                 | 3.3           | 5              | FDC2NK128914FR6D |
| 800 | 1200                    | 116        | 161      | 50      | 100                    | 7500              | 0.9            | 40        | 3.6                 | 6.3           | 5              | FDC2NK128916FR6D |
| 800 | 1500                    | 116        | 180      | 50      | 100                    | 8000              | 1.0            | 45        | 3.4                 | 5.3           | 5              | FDC2NK158918FR6D |
| 800 | 1800                    | 116        | 230      | 50      | 100                    | 11000             | 0.8            | 50        | 2.7                 | 6.1           | 5              | FDC2NK188923FR6D |
| 800 | 3200                    | 136        | 270      | 50      | 100                    | 15000             | 0.8            | 60        | 2.0                 | 4.7           | 2              | FDC2NK328027FR6D |
| 900 | 290                     | 75         | 101      | 32      | 55                     | 1530              | 2.0            | 45        | 5.6                 | 5.3           | 12             | FDC2QK297310FP6D |
| 900 | 400                     | 75         | 126      | 32      | 53                     | 1560              | 2.6            | 50        | 4.7                 | 3.9           | 12             | FDC2QK407312FP6D |
| 900 | 480                     | 75         | 146      | 32      | 51                     | 1540              | 2.9            | 55        | 4.6                 | 3.2           | 12             | FDC2QK487314FP6D |
| 900 | 480                     | 75         | 161      | 32      | 69                     | 2920              | 1.7            | 40        | 4.3                 | 6.1           | 12             | FDC2QK487316FP6D |
| 900 | 560                     | 75         | 180      | 32      | 68                     | 2960              | 1.8            | 45        | 4.2                 | 5.3           | 12             | FDC2QK567318FP6D |
| 900 | 380                     | 86         | 101      | 32      | 65                     | 2000              | 1.6            | 45        | 5.1                 | 5.3           | 8              | FDC2QK387510FP6D |
| 900 | 520                     | 86         | 126      | 32      | 59                     | 2000              | 2.1            | 50        | 4.7                 | 3.8           | 8              | FDC2QK527512FP6D |
| 900 | 580                     | 86         | 142      | 32      | 58                     | 2000              | 2.2            | 55        | 4.6                 | 3.4           | 8              | FDC2QK587514FP6D |
| 900 | 630                     | 86         | 146      | 32      | 55                     | 2030              | 2.4            | 55        | 4.6                 | 3.2           | 8              | FDC2QK637514FP6D |
| 900 | 650                     | 86         | 161      | 32      | 70                     | 3950              | 1.5            | 40        | 4.4                 | 6.1           | 8              | FDC2QK657516FP6D |
| 900 | 750                     | 86         | 180      | 32      | 70                     | 3950              | 1.6            | 45        | 4.3                 | 5.3           | 8              | FDC2QK757518FP6D |
| 900 | 1100                    | 86         | 260      | 32      | 70                     | 5800              | 1.3            | 55        | 3.0                 | 5.3           | 8              | FDC2QK118526FP6D |
| 900 | 500                     | 96         | 101      | 50      | 67                     | 2620              | 1.4            | 45        | 4.7                 | 5.2           | 6              | FDC2QK507610FR6D |
| 900 | 700                     | 96         | 126      | 50      | 67                     | 2700              | 1.6            | 50        | 4.1                 | 3.9           | 6              | FDC2QK707612FR6D |
| 900 | 800                     | 96         | 141      | 50      | 66                     | 2700              | 1.8            | 55        | 3.9                 | 3.4           | 6              | FDC2QK807614FR6D |
| 900 | 850                     | 96         | 146      | 50      | 66                     | 2700              | 1.8            | 55        | 3.8                 | 3.2           | 6              | FDC2QK857614FR6D |
| 900 | 900                     | 96         | 161      | 50      | 70                     | 5400              | 1.1            | 45        | 3.5                 | 6.0           | 6              | FDC2QK907616FR6D |
| 900 | 1000                    | 96         | 180      | 50      | 70                     | 5230              | 1.1            | 45        | 3.2                 | 5.2           | 6              | FDC2QK108618FR6D |
| 900 | 720                     | 116        | 101      | 50      | 80                     | 3800              | 1.1            | 45        | 5.4                 | 5.3           | 5              | FDC2QK727910FR6D |
| 900 | 1200                    | 116        | 146      | 50      | 71                     | 3860              | 1.4            | 55        | 4.9                 | 3.2           | 5              | FDC2QK128914FR6D |
| 900 | 1200                    | 116        | 161      | 50      | 100                    | 7280              | 0.9            | 40        | 3.6                 | 6.1           | 5              | FDC2QK128916FR6D |
| 900 | 1500                    | 116        | 180      | 50      | 60                     | 12000             | 2.0            | 65        | 4.8                 | 8.0           | 5              | FDC2QK158918FR6D |
| 900 | 1800                    | 116        | 230      | 50      | 100                    | 14400             | 0.8            | 60        | 2.4                 | 8.0           | 5              | FDC2QK188923FR6D |
| 900 | 3200                    | 136        | 270      | 50      | 100                    | 15000             | 0.8            | 60        | 2.0                 | 4.7           | 2              | FDC2QK328027FR6D |

## Rating and Part Number

| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |          |         | Irms 10KHz<br>A (50°C) | Peak Current<br>A | ESR 1KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Pkg Qty<br>pcs | Part Number      |
|------|-------------------------|------------|----------|---------|------------------------|-------------------|----------------|-----------|---------------------|---------------|----------------|------------------|
|      |                         | D<br>mm    | H1<br>mm | P<br>mm |                        |                   |                |           |                     |               |                |                  |
| 1000 | 220                     | 75         | 101      | 32      | 53                     | 1500              | 2.2            | 45        | 5.6                 | 6.8           | 12             | FDC3KK227310FP6D |
| 1000 | 300                     | 75         | 126      | 32      | 50                     | 1500              | 2.9            | 50        | 4.7                 | 5.0           | 12             | FDC3KK307312FP6D |
| 1000 | 360                     | 75         | 146      | 32      | 48                     | 1500              | 3.3            | 55        | 4.6                 | 4.2           | 12             | FDC3KK367314FP6D |
| 1000 | 360                     | 75         | 161      | 32      | 65                     | 2750              | 1.9            | 40        | 4.3                 | 7.6           | 12             | FDC3KK367316FP6D |
| 1000 | 420                     | 75         | 180      | 32      | 64                     | 2750              | 2.0            | 45        | 4.2                 | 6.5           | 12             | FDC3KK427318FP6D |
| 1000 | 290                     | 86         | 101      | 32      | 61                     | 1920              | 1.8            | 45        | 5.1                 | 6.6           | 8              | FDC3KK297510FP6D |
| 1000 | 400                     | 86         | 126      | 32      | 56                     | 1950              | 2.3            | 50        | 4.7                 | 4.9           | 8              | FDC3KK407512FP6D |
| 1000 | 470                     | 86         | 141      | 32      | 58                     | 2000              | 2.2            | 55        | 4.6                 | 4.3           | 8              | FDC3KK477514FP6D |
| 1000 | 480                     | 86         | 146      | 32      | 54                     | 2000              | 2.6            | 55        | 4.6                 | 4.2           | 8              | FDC3KK487514FP6D |
| 1000 | 500                     | 86         | 161      | 32      | 70                     | 3800              | 1.6            | 40        | 4.4                 | 7.6           | 8              | FDC3KK507516FP6D |
| 1000 | 560                     | 86         | 180      | 32      | 69                     | 3800              | 1.7            | 45        | 4.3                 | 6.8           | 8              | FDC3KK567518FP6D |
| 1000 | 900                     | 86         | 260      | 32      | 75                     | 5960              | 1.3            | 55        | 3.0                 | 6.6           | 8              | FDC3KK907526FP6D |
| 1000 | 380                     | 96         | 101      | 50      | 65                     | 2500              | 1.5            | 45        | 4.7                 | 6.6           | 6              | FDC3KK387610FR6D |
| 1000 | 500                     | 96         | 126      | 50      | 64                     | 2400              | 1.8            | 50        | 4.1                 | 4.8           | 6              | FDC3KK507612FR6D |
| 1000 | 600                     | 96         | 141      | 50      | 63                     | 2500              | 1.9            | 55        | 3.9                 | 4.2           | 6              | FDC3KK607614FR6D |
| 1000 | 650                     | 96         | 146      | 50      | 64                     | 2590              | 1.9            | 55        | 3.8                 | 4.0           | 6              | FDC3KK657614FR6D |
| 1000 | 650                     | 96         | 161      | 50      | 70                     | 4800              | 1.1            | 40        | 3.5                 | 7.4           | 6              | FDC3KK657616FR6D |
| 1000 | 780                     | 96         | 180      | 50      | 70                     | 5100              | 1.1            | 45        | 3.2                 | 6.5           | 6              | FDC3KK787618FR6D |
| 1000 | 540                     | 116        | 101      | 50      | 80                     | 3600              | 1.0            | 45        | 5.4                 | 6.7           | 5              | FDC3KK547910FR6D |
| 1000 | 740                     | 116        | 126      | 50      | 70                     | 3600              | 1.4            | 50        | 5.0                 | 4.9           | 5              | FDC3KK747912FR6D |
| 1000 | 900                     | 116        | 146      | 50      | 69                     | 6800              | 1.5            | 55        | 4.9                 | 7.6           | 5              | FDC3KK907914FR6D |
| 1000 | 1100                    | 116        | 180      | 50      | 92                     | 7280              | 1.2            | 45        | 3.4                 | 6.6           | 5              | FDC3KK118918FR6D |
| 1000 | 1600                    | 116        | 230      | 50      | 100                    | 8000              | 1.5            | 75        | 2.1                 | 5.0           | 5              | FDC3KK168923FR6D |
| 1000 | 2500                    | 136        | 270      | 50      | 100                    | 14500             | 0.9            | 60        | 2.0                 | 5.8           | 2              | FDC3KK258027FR6D |
| 1100 | 170                     | 75         | 101      | 32      | 50                     | 1700              | 3.2            | 60        | 3.8                 | 10.0          | 12             | FDC3MK177310FP6D |
| 1100 | 250                     | 75         | 126      | 32      | 49                     | 1430              | 3.0            | 50        | 4.7                 | 5.7           | 12             | FDC3MK257312FP6D |
| 1100 | 300                     | 75         | 146      | 32      | 46                     | 1430              | 3.5            | 55        | 4.6                 | 4.8           | 12             | FDC3MK307314FP6D |
| 1100 | 310                     | 75         | 161      | 32      | 65                     | 2780              | 1.9            | 40        | 4.3                 | 9.0           | 12             | FDC3MK317316FP6D |
| 1100 | 360                     | 75         | 180      | 32      | 64                     | 2800              | 2.0            | 45        | 4.2                 | 7.8           | 12             | FDC3MK367318FP6D |
| 1100 | 240                     | 86         | 101      | 32      | 60                     | 1880              | 1.9            | 45        | 5.1                 | 7.8           | 8              | FDC3MK247510FP6D |
| 1100 | 330                     | 86         | 126      | 32      | 55                     | 1890              | 2.4            | 50        | 4.7                 | 5.7           | 8              | FDC3MK337512FP6D |
| 1100 | 420                     | 86         | 142      | 32      | 57                     | 2100              | 2.3            | 55        | 4.6                 | 5.0           | 8              | FDC3MK427514FP6D |
| 1100 | 420                     | 86         | 161      | 32      | 63                     | 3800              | 1.7            | 40        | 4.4                 | 9.0           | 8              | FDC3MK427516FP6D |
| 1100 | 500                     | 86         | 180      | 32      | 67                     | 3800              | 1.8            | 45        | 4.3                 | 7.6           | 8              | FDC3MK507518FP6D |
| 1100 | 750                     | 86         | 260      | 32      | 70                     | 5800              | 1.3            | 55        | 3.0                 | 7.7           | 8              | FDC3MK757526FP6D |
| 1100 | 330                     | 96         | 101      | 50      | 65                     | 2600              | 1.5            | 45        | 4.7                 | 7.9           | 8              | FDC3MK337610FR6D |
| 1100 | 440                     | 96         | 126      | 50      | 63                     | 2500              | 1.8            | 50        | 4.1                 | 5.7           | 8              | FDC3MK447612FR6D |
| 1100 | 510                     | 96         | 141      | 50      | 62                     | 2500              | 2.0            | 55        | 3.9                 | 4.9           | 8              | FDC3MK517614FR6D |
| 1100 | 540                     | 96         | 146      | 50      | 62                     | 2500              | 2.1            | 55        | 3.8                 | 4.6           | 8              | FDC3MK547614FR6D |
| 1100 | 560                     | 96         | 161      | 50      | 70                     | 5000              | 1.1            | 40        | 3.5                 | 8.9           | 8              | FDC3MK567616FR6D |
| 1100 | 650                     | 96         | 180      | 50      | 70                     | 5000              | 1.2            | 45        | 3.2                 | 7.7           | 8              | FDC3MK657618FR6D |
| 1100 | 450                     | 116        | 101      | 50      | 80                     | 3500              | 1.0            | 45        | 5.4                 | 7.8           | 5              | FDC3MK457910FR6D |
| 1100 | 620                     | 116        | 126      | 50      | 70                     | 3500              | 1.4            | 50        | 5.0                 | 5.6           | 5              | FDC3MK627912FR6D |
| 1100 | 750                     | 116        | 146      | 50      | 66                     | 3500              | 1.6            | 55        | 4.9                 | 4.7           | 5              | FDC3MK757914FR6D |
| 1100 | 780                     | 116        | 161      | 50      | 100                    | 7000              | 0.9            | 40        | 3.6                 | 9.0           | 5              | FDC3MK787916FR6D |
| 1100 | 920                     | 116        | 180      | 50      | 96                     | 7200              | 1.1            | 45        | 3.4                 | 7.8           | 5              | FDC3MK927918FR6D |
| 1100 | 1200                    | 116        | 230      | 50      | 100                    | 11000             | 0.9            | 50        | 2.7                 | 9.2           | 5              | FDC3MK128923FR6D |
| 1100 | 2200                    | 136        | 270      | 50      | 100                    | 15000             | 0.9            | 60        | 2.0                 | 6.8           | 2              | FDC3MK228027FR6D |

## Rating and Part Number

| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |          |         | Irms 10KHz<br>A (50°C) | Peak Current<br>A | ESR 1KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Pkg Qty<br>pcs | Part Number      |
|------|-------------------------|------------|----------|---------|------------------------|-------------------|----------------|-----------|---------------------|---------------|----------------|------------------|
|      |                         | D<br>mm    | H1<br>mm | P<br>mm |                        |                   |                |           |                     |               |                |                  |
| 1200 | 140                     | 75         | 101      | 32      | 48                     | 1350              | 2.7            | 45        | 5.6                 | 6.8           | 12             | FDC3BK147310FP6D |
| 1200 | 200                     | 75         | 126      | 32      | 47                     | 1400              | 3.4            | 50        | 4.7                 | 7.0           | 12             | FDC3BK207312FP6D |
| 1200 | 240                     | 75         | 146      | 32      | 44                     | 1400              | 3.9            | 55        | 4.6                 | 5.8           | 12             | FDC3BK247314FP6D |
| 1200 | 240                     | 75         | 161      | 32      | 63                     | 2600              | 2.0            | 40        | 4.3                 | 10.8          | 12             | FDC3BK247316FP6D |
| 1200 | 280                     | 75         | 180      | 32      | 62                     | 2700              | 2.1            | 45        | 4.2                 | 9.6           | 12             | FDC3BK287318FP6D |
| 1200 | 190                     | 86         | 101      | 32      | 57                     | 1800              | 2.1            | 45        | 5.1                 | 9.5           | 8              | FDC3BK197510FP6D |
| 1200 | 260                     | 86         | 126      | 32      | 52                     | 1800              | 2.7            | 50        | 4.7                 | 6.9           | 8              | FDC3BK267512FP6D |
| 1200 | 320                     | 86         | 142      | 32      | 55                     | 1900              | 2.5            | 55        | 4.6                 | 5.9           | 8              | FDC3BK327514FP6D |
| 1200 | 330                     | 86         | 146      | 32      | 50                     | 1900              | 3.0            | 55        | 4.6                 | 5.8           | 8              | FDC3BK337514FP6D |
| 1200 | 330                     | 86         | 161      | 32      | 66                     | 3600              | 1.8            | 40        | 4.4                 | 10.9          | 8              | FDC3BK337516FP6D |
| 1200 | 380                     | 86         | 180      | 32      | 65                     | 3600              | 1.9            | 45        | 4.3                 | 9.5           | 8              | FDC3BK387518FP6D |
| 1200 | 580                     | 86         | 260      | 32      | 75                     | 5500              | 1.5            | 55        | 3.0                 | 9.5           | 8              | FDC3BK587526FP6D |
| 1200 | 250                     | 96         | 101      | 50      | 61                     | 2300              | 1.7            | 45        | 4.7                 | 9.2           | 6              | FDC3BK257610FR6D |
| 1200 | 350                     | 96         | 126      | 50      | 61                     | 2400              | 2.0            | 50        | 4.1                 | 6.9           | 6              | FDC3BK357612FR6D |
| 1200 | 400                     | 96         | 141      | 50      | 59                     | 2400              | 2.2            | 55        | 3.9                 | 6.0           | 6              | FDC3BK407614FR6D |
| 1200 | 420                     | 96         | 146      | 50      | 59                     | 2400              | 2.2            | 55        | 3.8                 | 5.7           | 6              | FDC3BK427614FR6D |
| 1200 | 450                     | 96         | 161      | 50      | 70                     | 4800              | 1.2            | 40        | 3.5                 | 10.7          | 6              | FDC3BK457616FR6D |
| 1200 | 500                     | 96         | 180      | 50      | 70                     | 4600              | 1.2            | 45        | 3.2                 | 9.2           | 6              | FDC3BK507618FR6D |
| 1200 | 360                     | 116        | 101      | 50      | 76                     | 3400              | 1.1            | 45        | 5.4                 | 9.4           | 5              | FDC3BK367910FR6D |
| 1200 | 500                     | 116        | 126      | 50      | 66                     | 3500              | 1.6            | 50        | 5.0                 | 7.0           | 5              | FDC3BK507912FR6D |
| 1200 | 600                     | 116        | 146      | 50      | 62                     | 3500              | 1.8            | 55        | 4.9                 | 5.8           | 5              | FDC3BK607914FR6D |
| 1200 | 620                     | 116        | 161      | 50      | 98                     | 6800              | 1.0            | 40        | 3.6                 | 11.0          | 5              | FDC3BK627916FR6D |
| 1200 | 720                     | 116        | 180      | 50      | 92                     | 6800              | 1.2            | 45        | 3.4                 | 9.4           | 5              | FDC3BK727918FR6D |
| 1200 | 950                     | 116        | 230      | 50      | 100                    | 10000             | 0.9            | 50        | 2.7                 | 10.5          | 5              | FDC3BK957923FR6D |
| 1200 | 1700                    | 136        | 270      | 50      | 100                    | 13900             | 0.9            | 60        | 2.0                 | 8.2           | 2              | FDC3BK178027FR6D |
| 1300 | 120                     | 75         | 101      | 32      | 46                     | 1300              | 2.9            | 45        | 5.6                 | 10.8          | 12             | FDC3SK127310FP6D |
| 1300 | 170                     | 75         | 126      | 32      | 44                     | 1350              | 3.7            | 50        | 4.7                 | 7.9           | 12             | FDC3SK177312FP6D |
| 1300 | 210                     | 75         | 146      | 32      | 43                     | 1400              | 4.1            | 55        | 4.6                 | 6.7           | 12             | FDC3SK217314FP6D |
| 1300 | 210                     | 75         | 161      | 32      | 62                     | 2650              | 2.1            | 40        | 4.3                 | 12.6          | 12             | FDC3SK217316FP6D |
| 1300 | 240                     | 75         | 180      | 32      | 60                     | 2600              | 2.3            | 45        | 4.2                 | 10.8          | 12             | FDC3SK247318FP6D |
| 1300 | 170                     | 86         | 101      | 32      | 55                     | 1850              | 2.2            | 45        | 5.1                 | 10.9          | 8              | FDC3SK177510FP6D |
| 1300 | 230                     | 86         | 126      | 32      | 51                     | 1850              | 2.8            | 50        | 4.7                 | 8.0           | 8              | FDC3SK237512FP6D |
| 1300 | 270                     | 86         | 142      | 32      | 52                     | 1800              | 2.8            | 55        | 4.6                 | 6.7           | 8              | FDC3SK277514FP6D |
| 1300 | 270                     | 86         | 146      | 32      | 48                     | 1800              | 3.3            | 55        | 4.6                 | 6.7           | 8              | FDC3SK277516FP6D |
| 1300 | 280                     | 86         | 161      | 32      | 66                     | 3500              | 1.8            | 40        | 4.4                 | 12.5          | 8              | FDC3SK287516FP6D |
| 1300 | 320                     | 86         | 180      | 32      | 65                     | 3500              | 1.9            | 45        | 4.3                 | 10.9          | 8              | FDC3SK327518FP6D |
| 1300 | 520                     | 86         | 260      | 32      | 70                     | 5600              | 1.5            | 55        | 3.0                 | 10.8          | 8              | FDC3SK527526FP6D |
| 1300 | 210                     | 96         | 101      | 50      | 60                     | 2300              | 1.8            | 45        | 4.7                 | 11.0          | 6              | FDC3SK217610FR6D |
| 1300 | 280                     | 96         | 126      | 50      | 58                     | 2300              | 2.1            | 50        | 4.1                 | 8.2           | 6              | FDC3SK287612FR6D |
| 1300 | 330                     | 96         | 141      | 50      | 57                     | 2300              | 2.3            | 55        | 3.9                 | 7.0           | 6              | FDC3SK337614FR6D |
| 1300 | 360                     | 96         | 146      | 50      | 58                     | 2400              | 2.3            | 55        | 3.8                 | 6.7           | 6              | FDC3SK367614FR6D |
| 1300 | 380                     | 96         | 161      | 50      | 70                     | 4700              | 1.2            | 40        | 3.5                 | 12.4          | 6              | FDC3SK387616FR6D |
| 1300 | 420                     | 96         | 180      | 50      | 70                     | 4500              | 1.3            | 45        | 3.2                 | 10.7          | 6              | FDC3SK427618FR6D |
| 1300 | 320                     | 116        | 101      | 50      | 73                     | 3500              | 1.2            | 45        | 5.4                 | 10.9          | 5              | FDC3SK327910FR6D |
| 1300 | 430                     | 116        | 126      | 50      | 66                     | 3400              | 1.6            | 50        | 5.0                 | 7.9           | 5              | FDC3SK437912FR6D |
| 1300 | 520                     | 116        | 146      | 50      | 62                     | 3400              | 1.8            | 55        | 4.9                 | 6.5           | 5              | FDC3SK527914FR6D |
| 1300 | 540                     | 116        | 161      | 50      | 98                     | 6800              | 1.0            | 40        | 3.6                 | 12.6          | 5              | FDC3SK547916FR6D |
| 1300 | 630                     | 116        | 180      | 50      | 92                     | 6800              | 1.2            | 45        | 3.4                 | 10.8          | 5              | FDC3SK637918FR6D |

## Rating and Part Number

| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |          |         | Irms 10KHz<br>A (50°C) | Peak Current<br>A | ESR 1KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Pkg Qty<br>pcs | Part Number      |
|------|-------------------------|------------|----------|---------|------------------------|-------------------|----------------|-----------|---------------------|---------------|----------------|------------------|
|      |                         | D<br>mm    | H1<br>mm | P<br>mm |                        |                   |                |           |                     |               |                |                  |
| 1300 | 820                     | 116        | 230      | 50      | 100                    | 10000             | 0.9            | 50        | 2.7                 | 12.2          | 5              | FDC3SK827923FR6D |
| 1300 | 1500                    | 136        | 270      | 50      | 100                    | 14000             | 1.0            | 60        | 2.0                 | 9.3           | 2              | FDC3SK158027FR6D |
| 1400 | 100                     | 75         | 101      | 32      | 44                     | 1250              | 3.1            | 45        | 5.6                 | 12.5          | 12             | FDC3TK107310FP6D |
| 1400 | 140                     | 75         | 126      | 32      | 43                     | 1300              | 4.0            | 50        | 4.7                 | 9.3           | 12             | FDC3TK147312FP6D |
| 1400 | 170                     | 75         | 146      | 32      | 40                     | 1300              | 4.6            | 55        | 4.6                 | 7.6           | 12             | FDC3TK177314FP6D |
| 1400 | 170                     | 75         | 161      | 32      | 59                     | 2500              | 2.3            | 40        | 4.3                 | 14.7          | 12             | FDC3TK177316FP6D |
| 1400 | 200                     | 75         | 180      | 32      | 58                     | 2500              | 2.4            | 45        | 4.2                 | 12.5          | 12             | FDC3TK207318FP6D |
| 1400 | 140                     | 86         | 101      | 32      | 53                     | 1800              | 2.4            | 45        | 5.1                 | 12.9          | 8              | FDC3TK147510FP6D |
| 1400 | 190                     | 86         | 126      | 32      | 49                     | 1800              | 3.1            | 50        | 4.7                 | 9.5           | 8              | FDC3TK197512FP6D |
| 1400 | 230                     | 86         | 142      | 32      | 51                     | 1800              | 2.9            | 55        | 4.6                 | 7.8           | 8              | FDC3TK237514FP6D |
| 1400 | 240                     | 86         | 161      | 32      | 64                     | 3500              | 1.9            | 40        | 4.4                 | 14.6          | 8              | FDC3TK247516FP6D |
| 1400 | 270                     | 86         | 180      | 32      | 62                     | 3400              | 2.1            | 45        | 4.3                 | 12.6          | 8              | FDC3TK277518FP6D |
| 1400 | 420                     | 86         | 260      | 32      | 70                     | 5200              | 1.5            | 55        | 3.0                 | 12.4          | 8              | FDC3TK427526FP6D |
| 1400 | 180                     | 96         | 101      | 50      | 59                     | 2250              | 1.8            | 45        | 4.7                 | 12.5          | 6              | FDC3TK187610FR6D |
| 1400 | 250                     | 96         | 126      | 50      | 58                     | 2300              | 2.2            | 50        | 4.1                 | 9.2           | 6              | FDC3TK257612FR6D |
| 1400 | 290                     | 96         | 141      | 50      | 57                     | 2300              | 2.4            | 55        | 3.9                 | 7.9           | 6              | FDC3TK297614FR6D |
| 1400 | 320                     | 96         | 161      | 50      | 70                     | 4600              | 1.2            | 40        | 3.5                 | 14.4          | 6              | FDC3TK327616FR6D |
| 1400 | 360                     | 96         | 180      | 50      | 70                     | 4500              | 1.3            | 45        | 3.2                 | 12.5          | 6              | FDC3TK367618FR6D |
| 1400 | 260                     | 116        | 101      | 50      | 70                     | 3200              | 1.3            | 45        | 5.4                 | 12.3          | 5              | FDC3TK267910FR6D |
| 1400 | 360                     | 116        | 126      | 50      | 62                     | 3200              | 1.8            | 50        | 5.0                 | 8.9           | 5              | FDC3TK367912FR6D |
| 1400 | 450                     | 116        | 146      | 50      | 59                     | 3400              | 2.0            | 55        | 4.9                 | 7.6           | 5              | FDC3TK457914FR6D |
| 1400 | 460                     | 116        | 161      | 50      | 94                     | 6500              | 1.1            | 40        | 3.6                 | 14.1          | 5              | FDC3TK467916FR6D |
| 1400 | 540                     | 116        | 180      | 50      | 79                     | 6700              | 1.3            | 45        | 3.4                 | 12.4          | 5              | FDC3TK547918FR6D |
| 1400 | 700                     | 116        | 230      | 50      | 94                     | 9900              | 0.9            | 50        | 2.7                 | 14.1          | 5              | FDC3TK707923FR6D |
| 1400 | 1300                    | 116        | 270      | 50      | 100                    | 14000             | 1.0            | 60        | 2.0                 | 10.8          | 5              | FDC3TK138927FR6D |
| 1500 | 90                      | 75         | 101      | 32      | 43                     | 1200              | 3.3            | 45        | 5.6                 | 13.3          | 12             | FDC3UK906310FP6D |
| 1500 | 120                     | 75         | 126      | 32      | 41                     | 1200              | 4.4            | 50        | 4.7                 | 10.0          | 12             | FDC3UK127312FP6D |
| 1500 | 150                     | 75         | 146      | 32      | 39                     | 1200              | 4.9            | 55        | 4.6                 | 8.0           | 12             | FDC3UK157314FP6D |
| 1500 | 150                     | 75         | 161      | 32      | 58                     | 2300              | 2.4            | 40        | 4.3                 | 15.3          | 12             | FDC3UK157316FP6D |
| 1500 | 170                     | 75         | 180      | 32      | 57                     | 2300              | 2.5            | 45        | 4.2                 | 13.5          | 12             | FDC3UK177318FP6D |
| 1500 | 120                     | 86         | 101      | 32      | 51                     | 1600              | 2.6            | 45        | 5.1                 | 13.3          | 8              | FDC3UK127510FP6D |
| 1500 | 170                     | 86         | 126      | 32      | 47                     | 1600              | 3.3            | 50        | 4.7                 | 9.4           | 8              | FDC3UK177512FP6D |
| 1500 | 200                     | 86         | 142      | 32      | 50                     | 1700              | 3.0            | 55        | 4.6                 | 8.5           | 8              | FDC3UK207514FP6D |
| 1500 | 210                     | 86         | 161      | 32      | 63                     | 3300              | 2.0            | 40        | 4.4                 | 15.7          | 8              | FDC3UK217516FP6D |
| 1500 | 240                     | 86         | 180      | 32      | 62                     | 3300              | 2.1            | 45        | 4.3                 | 13.8          | 8              | FDC3UK247518FP6D |
| 1500 | 380                     | 86         | 260      | 32      | 70                     | 5000              | 1.5            | 55        | 3.0                 | 13.2          | 8              | FDC3UK387526FP6D |
| 1500 | 160                     | 96         | 101      | 50      | 58                     | 2150              | 1.9            | 45        | 4.7                 | 13.4          | 6              | FDC3UK167610FR6D |
| 1500 | 210                     | 96         | 126      | 50      | 56                     | 2100              | 2.3            | 50        | 4.1                 | 10.0          | 6              | FDC3UK217612FR6D |
| 1500 | 250                     | 96         | 141      | 50      | 55                     | 2100              | 2.5            | 55        | 3.9                 | 8.4           | 6              | FDC3UK257614FR6D |
| 1500 | 270                     | 96         | 161      | 50      | 70                     | 4300              | 1.3            | 40        | 3.5                 | 15.9          | 6              | FDC3UK277616FR6D |
| 1500 | 320                     | 96         | 180      | 50      | 70                     | 4300              | 1.3            | 45        | 3.2                 | 13.4          | 6              | FDC3UK327618FR6D |
| 1500 | 230                     | 116        | 101      | 50      | 68                     | 3100              | 1.4            | 45        | 5.4                 | 13.5          | 5              | FDC3UK237910FR6D |
| 1500 | 320                     | 116        | 126      | 50      | 60                     | 3100              | 1.9            | 50        | 5.0                 | 9.7           | 5              | FDC3UK327912FR6D |
| 1500 | 390                     | 116        | 146      | 50      | 58                     | 3200              | 2.1            | 55        | 4.9                 | 8.2           | 5              | FDC3UK397914FR6D |
| 1500 | 420                     | 116        | 161      | 50      | 94                     | 6500              | 1.1            | 40        | 3.6                 | 15.5          | 5              | FDC3UK427916FR6D |
| 1500 | 470                     | 116        | 180      | 50      | 79                     | 6300              | 1.3            | 45        | 3.4                 | 13.4          | 5              | FDC3UK477918FR6D |
| 1500 | 600                     | 116        | 230      | 50      | 89                     | 9200              | 1.0            | 50        | 2.7                 | 15.3          | 5              | FDC3UK607923FR6D |
| 1500 | 1100                    | 136        | 270      | 50      | 100                    | 12800             | 1.1            | 60        | 2.0                 | 11.6          | 2              | FDC3UK118027FR6D |

## Rating and Part Number

| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |          |         | Irms 10KHz<br>A (50°C) | Peak Current<br>A | ESR 1KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Pkg Qty<br>pcs | Part Number      |
|------|-------------------------|------------|----------|---------|------------------------|-------------------|----------------|-----------|---------------------|---------------|----------------|------------------|
|      |                         | D<br>mm    | H1<br>mm | P<br>mm |                        |                   |                |           |                     |               |                |                  |
| 2000 | 110                     | 86         | 146      | 32      | 42                     | 1800              | 3.5            | 60        | 4.5                 | 16.4          | 8              | FDC3DK117514FP6D |
| 2000 | 200                     | 86         | 230      | 32      | 69                     | 3600              | 1.8            | 60        | 3.2                 | 18.0          | 8              | FDC3DK207523FP6D |
| 2000 | 200                     | 116        | 126      | 50      | 61                     | 3600              | 2.1            | 60        | 3.5                 | 18.0          | 5              | FDC3DK207912FR6D |
| 2000 | 220                     | 116        | 146      | 50      | 60                     | 3600              | 2.3            | 65        | 3.3                 | 16.4          | 5              | FDC3DK227914FR6D |
| 2000 | 280                     | 116        | 180      | 50      | 93                     | 7400              | 1.1            | 55        | 2.9                 | 26.4          | 5              | FDC3DK287918FR6D |
| 2000 | 400                     | 116        | 230      | 50      | 93                     | 7400              | 1.3            | 60        | 2.4                 | 18.5          | 5              | FDC3DK407923FR6D |
| 2000 | 250                     | 136        | 126      | 50      | 67                     | 5000              | 1.8            | 60        | 2.9                 | 20.0          | 2              | FDC3DK257012FR6D |
| 2000 | 320                     | 136        | 146      | 50      | 66                     | 5000              | 2.0            | 65        | 2.7                 | 15.6          | 2              | FDC3DK327014FR6D |
| 2000 | 360                     | 136        | 180      | 50      | 99                     | 10000             | 1.0            | 55        | 2.4                 | 27.8          | 2              | FDC3DK367018FR6D |
| 2000 | 500                     | 136        | 230      | 50      | 98                     | 10000             | 1.2            | 60        | 2.1                 | 20.0          | 2              | FDC3DK507023FR6D |
| 2000 | 620                     | 136        | 270      | 50      | 98                     | 10000             | 1.3            | 60        | 1.9                 | 16.1          | 2              | FDC3DK627027FR6D |
| 2200 | 100                     | 86         | 146      | 32      | 41                     | 1800              | 3.7            | 65        | 4.5                 | 18.0          | 8              | FDC3CK107514FP6D |
| 2200 | 150                     | 86         | 230      | 32      | 68                     | 3600              | 1.9            | 60        | 3.2                 | 24.0          | 8              | FDC3CK157523FP6D |
| 2200 | 150                     | 116        | 126      | 50      | 59                     | 3400              | 2.2            | 60        | 3.5                 | 22.7          | 5              | FDC3CK157912FR6D |
| 2200 | 180                     | 116        | 146      | 50      | 58                     | 3400              | 2.5            | 65        | 3.3                 | 18.9          | 5              | FDC3CK187914FR6D |
| 2200 | 220                     | 116        | 180      | 50      | 91                     | 7200              | 1.1            | 55        | 2.9                 | 32.7          | 5              | FDC3CK227918FR6D |
| 2200 | 300                     | 116        | 230      | 50      | 91                     | 7100              | 1.4            | 60        | 2.4                 | 23.7          | 5              | FDC3CK307923FR6D |
| 2200 | 220                     | 136        | 126      | 50      | 66                     | 4800              | 1.9            | 60        | 2.9                 | 21.8          | 2              | FDC3CK227012FR6D |
| 2200 | 250                     | 136        | 146      | 50      | 65                     | 5000              | 2.1            | 65        | 2.7                 | 20.0          | 2              | FDC3CK257014FR6D |
| 2200 | 300                     | 136        | 180      | 50      | 97                     | 9800              | 1.0            | 55        | 2.4                 | 32.7          | 2              | FDC3CK307018FR6D |
| 2200 | 420                     | 136        | 230      | 50      | 96                     | 9800              | 1.2            | 60        | 2.1                 | 23.3          | 2              | FDC3CK427023FR6D |
| 2200 | 500                     | 136        | 270      | 50      | 97                     | 10000             | 1.4            | 60        | 1.9                 | 20.0          | 2              | FDC3CK507027FR6D |
| 2400 | 75                      | 86         | 146      | 32      | 40                     | 1800              | 3.9            | 65        | 4.5                 | 24.0          | 8              | FDC4AK756514FP6D |
| 2400 | 120                     | 86         | 230      | 32      | 65                     | 3500              | 2.0            | 60        | 3.2                 | 29.2          | 8              | FDC4AK127523FP6D |
| 2400 | 120                     | 116        | 126      | 50      | 58                     | 3500              | 2.3            | 60        | 3.5                 | 29.2          | 5              | FDC4AK127912FR6D |
| 2400 | 140                     | 116        | 146      | 50      | 56                     | 3300              | 2.6            | 65        | 3.3                 | 23.6          | 5              | FDC4AK147914FR6D |
| 2400 | 170                     | 116        | 180      | 50      | 89                     | 6800              | 1.2            | 55        | 2.9                 | 40.0          | 5              | FDC4AK177918FR6D |
| 2400 | 240                     | 116        | 230      | 50      | 89                     | 6900              | 1.4            | 60        | 2.4                 | 28.8          | 5              | FDC4AK247923FR6D |
| 2400 | 160                     | 136        | 126      | 50      | 63                     | 4600              | 2.0            | 60        | 2.9                 | 28.8          | 2              | FDC4AK167012FR6D |
| 2400 | 200                     | 136        | 146      | 50      | 63                     | 4700              | 2.2            | 65        | 2.7                 | 23.5          | 2              | FDC4AK207014FR6D |
| 2400 | 240                     | 136        | 180      | 50      | 95                     | 9600              | 1.1            | 55        | 2.4                 | 40.0          | 2              | FDC4AK247018FR6D |
| 2400 | 330                     | 136        | 230      | 50      | 94                     | 9600              | 1.3            | 60        | 2.1                 | 29.1          | 2              | FDC4AK337023FR6D |
| 2400 | 410                     | 136        | 270      | 50      | 95                     | 9600              | 1.4            | 60        | 1.9                 | 23.4          | 2              | FDC4AK417027FR6D |
| 2600 | 63                      | 86         | 146      | 32      | 38                     | 1700              | 4.1            | 65        | 4.5                 | 27.0          | 8              | FDC4BK636514FP6D |
| 2600 | 100                     | 86         | 230      | 32      | 63                     | 3400              | 2.1            | 60        | 3.2                 | 34.0          | 8              | FDC4BK107523FP6D |
| 2600 | 100                     | 116        | 126      | 50      | 57                     | 3400              | 2.4            | 60        | 3.6                 | 34.0          | 5              | FDC4BK107912FR6D |
| 2600 | 120                     | 116        | 146      | 50      | 55                     | 3300              | 2.7            | 65        | 3.3                 | 27.5          | 5              | FDC4BK127914FR6D |
| 2600 | 140                     | 116        | 180      | 50      | 87                     | 6600              | 1.2            | 55        | 2.9                 | 47.1          | 5              | FDC4BK147918FR6D |
| 2600 | 200                     | 116        | 230      | 50      | 87                     | 6700              | 1.5            | 60        | 2.5                 | 33.5          | 5              | FDC4BK207923FR6D |
| 2600 | 140                     | 136        | 126      | 50      | 63                     | 4700              | 2.0            | 60        | 3.0                 | 33.6          | 2              | FDC4BK147012FR6D |
| 2600 | 170                     | 136        | 146      | 50      | 62                     | 4700              | 2.3            | 65        | 2.8                 | 27.6          | 2              | FDC4BK177014FR6D |
| 2600 | 200                     | 136        | 180      | 50      | 94                     | 9400              | 1.1            | 55        | 2.5                 | 47.0          | 2              | FDC4BK207018FR6D |
| 2600 | 280                     | 136        | 230      | 50      | 93                     | 9600              | 1.3            | 60        | 2.1                 | 34.3          | 2              | FDC4BK287023FR6D |
| 2600 | 340                     | 136        | 270      | 50      | 92                     | 9400              | 1.5            | 60        | 1.9                 | 27.6          | 2              | FDC4BK347027FR6D |
| 2800 | 54                      | 86         | 146      | 32      | 37                     | 1700              | 4.3            | 65        | 4.5                 | 31.5          | 8              | FDC4CK546514FP6D |
| 2800 | 88                      | 86         | 230      | 32      | 62                     | 3400              | 2.2            | 60        | 3.2                 | 38.6          | 8              | FDC4CK886523FP6D |
| 2800 | 88                      | 116        | 126      | 50      | 56                     | 3300              | 2.5            | 60        | 3.6                 | 37.5          | 5              | FDC4CK886912FR6D |
| 2800 | 100                     | 116        | 146      | 50      | 53                     | 3200              | 2.9            | 65        | 3.4                 | 32.0          | 5              | FDC4CK107914FR6D |

## Rating and Part Number

| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |          |         | Irms 10KHz<br>A (50°C) | Peak Current<br>A | ESR 1KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Pkg Qty<br>pcs | Part Number      |
|------|-------------------------|------------|----------|---------|------------------------|-------------------|----------------|-----------|---------------------|---------------|----------------|------------------|
|      |                         | D<br>mm    | H1<br>mm | P<br>mm |                        |                   |                |           |                     |               |                |                  |
| 2800 | 120                     | 116        | 180      | 50      | 85                     | 6500              | 1.3            | 55        | 2.9                 | 54.2          | 5              | FDC4CK127918FR6D |
| 2800 | 180                     | 116        | 230      | 50      | 85                     | 6600              | 1.5            | 60        | 2.5                 | 36.7          | 5              | FDC4CK187923FR6D |
| 2800 | 120                     | 136        | 126      | 50      | 62                     | 4700              | 2.1            | 60        | 3.0                 | 39.2          | 2              | FDC4CK127012FR6D |
| 2800 | 140                     | 136        | 146      | 50      | 59                     | 4400              | 2.4            | 65        | 2.8                 | 31.4          | 2              | FDC4CK147014FR6D |
| 2800 | 170                     | 136        | 180      | 50      | 92                     | 9200              | 1.1            | 55        | 2.5                 | 54.1          | 2              | FDC4CK177018FR6D |
| 2800 | 240                     | 136        | 230      | 50      | 92                     | 9300              | 1.3            | 60        | 2.1                 | 38.8          | 2              | FDC4CK247023FR6D |
| 2800 | 290                     | 136        | 270      | 50      | 91                     | 9200              | 1.5            | 60        | 1.9                 | 31.7          | 2              | FDC4CK297027FR6D |
| 3000 | 46                      | 86         | 146      | 32      | 36                     | 1600              | 4.6            | 65        | 4.6                 | 34.8          | 8              | FDC3FK466514FP6D |
| 3000 | 75                      | 86         | 230      | 32      | 61                     | 3100              | 2.3            | 60        | 3.2                 | 41.3          | 8              | FDC3FK756523FP6D |
| 3000 | 75                      | 116        | 126      | 50      | 54                     | 3100              | 2.6            | 60        | 3.6                 | 41.3          | 5              | FDC3FK756912FR6D |
| 3000 | 90                      | 116        | 146      | 50      | 53                     | 3100              | 2.9            | 65        | 3.3                 | 34.4          | 5              | FDC3FK906914FR6D |
| 3000 | 100                     | 116        | 180      | 50      | 83                     | 5800              | 1.3            | 55        | 3.0                 | 58.0          | 5              | FDC3FK107918FR6D |
| 3000 | 140                     | 116        | 230      | 50      | 82                     | 5800              | 1.6            | 60        | 2.5                 | 41.4          | 5              | FDC3FK147923FR6D |
| 3000 | 100                     | 136        | 126      | 50      | 60                     | 4200              | 2.2            | 60        | 3.0                 | 42.0          | 2              | FDC3FK107012FR6D |
| 3000 | 120                     | 136        | 146      | 50      | 58                     | 4100              | 2.5            | 65        | 2.8                 | 34.2          | 2              | FDC3FK127014FR6D |
| 3000 | 140                     | 136        | 180      | 50      | 89                     | 8200              | 1.2            | 55        | 2.5                 | 58.6          | 2              | FDC3FK147018FR6D |
| 3000 | 200                     | 136        | 230      | 50      | 89                     | 8400              | 1.4            | 60        | 2.2                 | 42.0          | 2              | FDC3FK207023FR6D |
| 3000 | 250                     | 136        | 270      | 50      | 89                     | 8600              | 1.6            | 60        | 1.9                 | 34.4          | 2              | FDC3FK257027FR6D |
| 3200 | 40                      | 86         | 146      | 32      | 35                     | 1500              | 4.9            | 65        | 4.6                 | 37.5          | 8              | FDC4DK406514FP6D |
| 3200 | 65                      | 86         | 230      | 32      | 59                     | 2900              | 2.4            | 60        | 3.2                 | 44.6          | 8              | FDC4DK656523FP6D |
| 3200 | 65                      | 116        | 126      | 50      | 53                     | 2900              | 2.7            | 60        | 3.6                 | 44.6          | 5              | FDC4DK656912FR6D |
| 3200 | 80                      | 116        | 146      | 50      | 52                     | 2900              | 3.1            | 65        | 3.4                 | 36.3          | 5              | FDC4DK806914FR6D |
| 3200 | 92                      | 116        | 180      | 50      | 83                     | 5700              | 1.3            | 55        | 3.0                 | 62.0          | 5              | FDC4DK926918FR6D |
| 3200 | 120                     | 116        | 230      | 50      | 80                     | 5400              | 1.7            | 60        | 2.5                 | 45.0          | 5              | FDC4DK127923FR6D |
| 3200 | 90                      | 136        | 126      | 50      | 59                     | 4000              | 2.2            | 60        | 3.0                 | 44.4          | 2              | FDC4DK906012FR6D |
| 3200 | 110                     | 136        | 146      | 50      | 58                     | 4000              | 2.5            | 65        | 2.8                 | 36.4          | 2              | FDC4DK117014FR6D |
| 3200 | 120                     | 136        | 180      | 50      | 87                     | 7500              | 1.2            | 55        | 2.6                 | 62.5          | 2              | FDC4DK127018FR6D |
| 3200 | 180                     | 136        | 230      | 50      | 89                     | 8100              | 1.4            | 60        | 2.2                 | 45.0          | 2              | FDC4DK187023FR6D |
| 3200 | 220                     | 136        | 270      | 50      | 88                     | 8100              | 1.6            | 60        | 1.9                 | 36.8          | 2              | FDC4DK227027FR6D |
| 3600 | 32                      | 86         | 146      | 32      | 38                     | 1600              | 4.0            | 65        | 4.6                 | 50.0          | 8              | FDC4EK326514FP6D |
| 3600 | 45                      | 86         | 230      | 32      | 64                     | 3300              | 2.0            | 60        | 3.3                 | 73.3          | 8              | FDC4EK456523FP6D |
| 3600 | 44                      | 116        | 126      | 50      | 57                     | 3200              | 2.3            | 60        | 3.7                 | 72.7          | 5              | FDC4EK446912FR6D |
| 3600 | 54                      | 116        | 146      | 50      | 55                     | 3200              | 2.7            | 65        | 3.4                 | 59.3          | 5              | FDC4EK546914FR6D |
| 3600 | 88                      | 116        | 230      | 50      | 87                     | 6400              | 1.4            | 60        | 2.5                 | 72.7          | 5              | FDC4EK886923FR6D |
| 3600 | 110                     | 116        | 270      | 50      | 85                     | 6500              | 1.6            | 60        | 2.3                 | 59.1          | 5              | FDC4EK117927FR6D |
| 3600 | 61                      | 136        | 126      | 50      | 63                     | 4500              | 2.0            | 60        | 3.0                 | 73.8          | 2              | FDC4EK616012FR6D |
| 3600 | 75                      | 136        | 146      | 50      | 61                     | 4400              | 2.3            | 65        | 2.8                 | 58.7          | 2              | FDC4EK756014FR6D |
| 3600 | 120                     | 136        | 230      | 50      | 92                     | 8800              | 1.3            | 60        | 2.2                 | 73.3          | 2              | FDC4EK127023FR6D |
| 3600 | 150                     | 136        | 270      | 50      | 92                     | 8800              | 1.5            | 60        | 2.0                 | 58.7          | 2              | FDC4EK157027FR6D |
| 4000 | 24                      | 86         | 146      | 32      | 37                     | 1650              | 4.2            | 65        | 4.6                 | 68.8          | 8              | FDC3GK246514FP6D |
| 4000 | 38                      | 86         | 230      | 32      | 62                     | 3200              | 2.1            | 60        | 3.3                 | 84.2          | 8              | FDC3GK386523FP6D |
| 4000 | 37                      | 116        | 126      | 50      | 55                     | 3100              | 2.4            | 60        | 3.7                 | 83.8          | 5              | FDC3GK376912FR6D |
| 4000 | 46                      | 116        | 146      | 50      | 54                     | 3100              | 2.8            | 65        | 3.4                 | 67.4          | 5              | FDC3GK466914FR6D |
| 4000 | 74                      | 116        | 230      | 50      | 85                     | 6300              | 1.5            | 60        | 2.5                 | 85.1          | 5              | FDC3GK746923FR6D |
| 4000 | 92                      | 116        | 270      | 50      | 83                     | 6300              | 1.7            | 60        | 2.3                 | 68.5          | 5              | FDC3GK926927FR6D |
| 4000 | 52                      | 136        | 126      | 50      | 62                     | 4400              | 2.1            | 60        | 3.0                 | 84.6          | 2              | FDC3GK526012FR6D |
| 4000 | 64                      | 136        | 146      | 50      | 60                     | 4400              | 2.3            | 65        | 2.8                 | 68.8          | 2              | FDC3GK646014FR6D |
| 4000 | 100                     | 136        | 230      | 50      | 90                     | 8500              | 1.3            | 60        | 2.2                 | 85.0          | 2              | FDC3GK107023FR6D |

## Rating and Part Number

| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |          |    | Irms 10KHz | Peak Current | ESR 1KHz | ESL  | Thermal Res | dv/dt | Pkg Qty | Part Number      |
|------|-------------------------|------------|----------|----|------------|--------------|----------|------|-------------|-------|---------|------------------|
|      |                         | D          | H1       | P  |            |              |          |      |             |       |         |                  |
| mm   | mm                      | mm         | A (50°C) | A  | mΩ         | nH           | °C/W     | V/us | pcs         |       |         |                  |
| 4000 | 130                     | 136        | 270      | 50 | 91         | 8900         | 1.5      | 60   | 2.0         | 68.5  | 2       | FDC3GK137027FR6D |

**Note:**

**Part Nmber 13th digit (Terminal code) : F means Female terminals (M6), M means Male terminals (M8)**

料号第 13 码 (引出端代码): F 代表螺孔式(M6), M 代表螺栓式(M8)

## Packaging Information

Capacitors are well protected by foams. And then are packaged in the cartons.

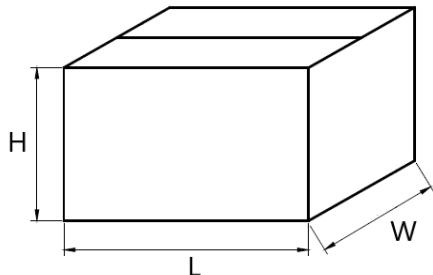


Table 1 carton dimensions

| Carton No. | L (mm) | W (mm) | H (mm) |
|------------|--------|--------|--------|
| 1          | 375    | 285    | 235    |
| 2          | 375    | 285    | 300    |
| 3          | 375    | 285    | 330    |
| 4          | 375    | 285    | 365    |
| 5          | 375    | 285    | 265    |

According to the capacitor's diameter, every carton contains capacitors as per the following Table 2.

Table 2 Capacitor quantity of each carton

| Capacitor Diameter (mm) | Quantity (pcs) |
|-------------------------|----------------|
| 75                      | 12             |
| 86                      | 8              |
| 96                      | 6              |
| 106                     | 5              |
| 116                     | 5              |
| 136                     | 2              |

# Metalized Polypropylene Film DC-Link Capacitors

## FDD Series - 500 ~ 1200VDC (Plastic Case with Snap-in pins)



### Overview

The FDD capacitor is constructed of metallized polypropylene film in cylindrical plastic case with snap-in pins and filled with epoxy resin.

### Applications

Widely used in DC Link, high performance DC filtering, motor drive systems, welder and elevator.

### Features

- Self-healing
- High capacitance density
- Low ESR and high ripple current
- Special snap-in pins design to replace electrolytic capacitors



### Qualification

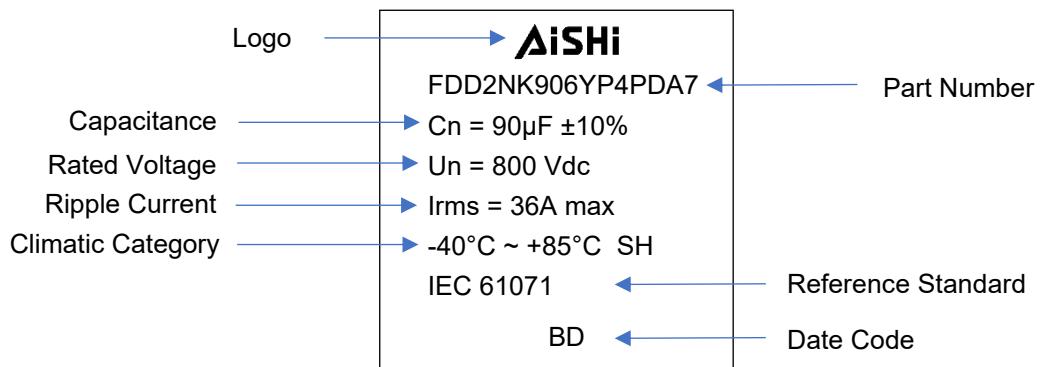
|                    |                      |
|--------------------|----------------------|
| Reference Standard | IEC 61071            |
| Climate Category   | 40/85/56 IEC 60068-1 |



### General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 500Vdc to 1200Vdc  |
| Capacitance Range           | 8μF to 120μF   |
| Capacitance Tolerance       | ±5% or ±10% at +25°C   |
| Operating Temperature Range | -40°C ~ +105°C<br>(85°C ~ 105°C, decreasing factor 1.25% per °C for rated voltage)   |
| Climatic Category           | 40/85/56 IEC 60068-1   |
| Dissipation Factor          | ≤0.002 (0.2%) at 1KHz; C ≤20μF at 25°C<br>≤0.003 (0.3%) at 1KHz; C >20μF at 25°C<br>≤0.004 (0.4%) at 1KHz; C >80μF at 25°C |
| Insulation Resistance       | IR x C ≥ 30,000s at 100VDC 1minute at +25°C  |

## Marking



## Part Number System

| <b>F</b>       | <b>DD</b>   | <b>2N</b>   | <b>K</b>            | <b>906</b>  | <b>L63</b>               | <b>PDA</b>                   | <b>7</b>                        |
|----------------|---|---|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series  | Voltage (VDC)   | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Terminal Length Code            |
| F = Film       | DC Link,<br>PBT Case<br>Snap-in<br>Type,<br>Metallized<br>PP Film | 500=2H<br>600=2K<br>700=2M<br>800=2N<br>900=2Q<br>1000=3K<br>1200=3B<br>1100=3M | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Bottom Stud Code Table |

## Size Code Table

| Digit One<br>Case Diameter: D ± 1.0 |   | Digit Two and Three<br>Case Height: L ± 1.0 |    |
|-------------------------------------|---|---|----|
| 36.0mm                              | S | 51mm  | 51 |
| 50.0mm                              | U | 54mm  | 54 |
| 56.3mm                              | L | 63mm  | 63 |
| 60.0mm                              | W | 70mm  | 70 |
| 63.5mm                              | 1 | 80mm  | 80 |
| 65.0mm                              | 2 | 90mm  | 90 |

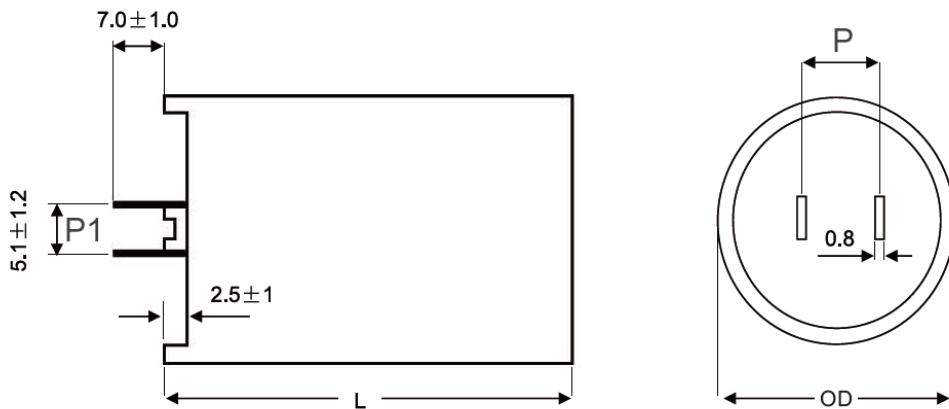
## Terminal Code

| Digit One<br>Lead/Terminal Type |   | Digit Two<br>Lead Space: P ± 0.5 |   | Digit Three<br>Lead Ipsilateral: P1 ± 0.5 |   |
|---------------------------------|---|----------------------------------|---|---|---|
| Fast On                         | P | 10.0mm                           | C | 5.1mm                                     | A |
|                                 |   | 12.7mm                           | D | 7.5mm                                     | C |
|                                 |   | 15.0mm                           | E | 10.2mm                                    | B |
|                                 |   | 22.5mm                           | F | 12.7mm                                    | G |

## Lead Length Code

| Terminal Length<br>L0 ± 0.5 |   |
|-----------------------------|---|
| 5mm                         | 5 |
| 6mm                         | 6 |
| 7mm                         | 7 |
| 10mm                        | 0 |

### Outline Drawing (mm)

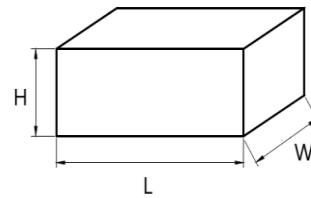


### Rating and Part Number

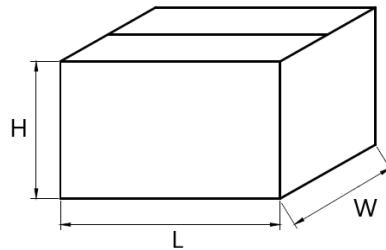
| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |      | P    | Irms 100KHz |        |        | Peak Current | ESR 100KHZ | ESL | Thermal Res | dv/dt | Part Number      |
|------|-------------------------|------------|------|------|-------------|--------|--------|--------------|------------|-----|-------------|-------|------------------|
|      |                         | OD         | L    |      | 25°C A      | 50°C A | 70°C A |              |            |     |             |       |                  |
| mm   | mm                      | mm         | mm   | mm   | mm          | mm     | mm     | A            | mΩ         | nH  | °C/W        | V/us  |                  |
| 500  | 35                      | 36.0       | 54.0 | 12.7 | 22.0        | 18.5   | 13.0   | 1050         | 8.0        | 25  | 8.6         | 30    | FDD2HK356S54PDA7 |
| 500  | 80                      | 50.0       | 63.0 | 12.7 | 30.0        | 25.5   | 13.5   | 2400         | 6.0        | 25  | 8.2         | 30    | FDD2HK806U63PDA7 |
| 500  | 100                     | 50.0       | 63.0 | 12.7 | 35.0        | 28.0   | 14.5   | 3000         | 5.8        | 25  | 7.9         | 30    | FDD2HK107U63PDA7 |
| 500  | 120                     | 56.3       | 63.0 | 12.7 | 38.0        | 32.0   | 16.0   | 3600         | 4.5        | 25  | 7.5         | 30    | FDD2HK127L63PDA7 |
| 600  | 30                      | 36.0       | 54.0 | 12.7 | 22.0        | 18.0   | 12.0   | 900          | 9.0        | 25  | 9.8         | 30    | FDD2KK306S54PDA7 |
| 600  | 80                      | 50.0       | 63.0 | 12.7 | 32.0        | 25.0   | 14.0   | 2400         | 6.8        | 25  | 9.5         | 30    | FDD2KK806U63PDA7 |
| 600  | 100                     | 56.3       | 63.0 | 12.7 | 36.0        | 30.0   | 15.5   | 3000         | 5.5        | 25  | 8.5         | 30    | FDD2KK107L63PDA7 |
| 700  | 20                      | 36.0       | 54.0 | 12.7 | 20.0        | 16.0   | 10.0   | 800          | 10.0       | 25  | 10.8        | 40    | FDD2MK206S54PDA7 |
| 700  | 50                      | 50.0       | 63.0 | 12.7 | 30.0        | 24.0   | 12.0   | 2000         | 7.0        | 25  | 9.4         | 40    | FDD2MK506U63PDA7 |
| 700  | 80                      | 56.3       | 63.0 | 12.7 | 34.0        | 27.0   | 14.0   | 2400         | 6.0        | 25  | 8.0         | 30    | FDD2MK806L63PDA7 |
| 800  | 15                      | 36.0       | 54.0 | 12.7 | 19.0        | 15.0   | 10.0   | 750          | 10.0       | 25  | 10.5        | 50    | FDD2NK156S54PDA7 |
| 800  | 40                      | 50.0       | 63.0 | 12.7 | 28.0        | 23.0   | 12.0   | 2000         | 7.5        | 25  | 9.5         | 50    | FDD2NK406U63PDA7 |
| 800  | 60                      | 50.0       | 51.0 | 12.7 | 33.0        | 27.0   | 16.0   | 3000         | 4.0        | 25  | 6.5         | 50    | FDD2NK606U51PDA7 |
| 800  | 60                      | 50.0       | 63.0 | 12.7 | 33.0        | 27.0   | 16.0   | 3000         | 4.0        | 25  | 6.5         | 50    | FDD2NK606U63PDA7 |
| 800  | 90                      | 56.3       | 63.0 | 12.7 | 36.0        | 29.0   | 20.0   | 4500         | 3.0        | 25  | 5.0         | 50    | FDD2NK906L63PDA7 |
| 800  | 90                      | 63.5       | 51.0 | 12.7 | 36.0        | 29.0   | 20.0   | 4500         | 3.0        | 25  | 5.0         | 50    | FDD2NK906151PDA7 |
| 900  | 14                      | 36.0       | 54.0 | 12.7 | 18.0        | 15.0   | 9.5    | 700          | 10.5       | 25  | 10.5        | 50    | FDD2QK146S54PDA7 |
| 900  | 35                      | 50.0       | 63.0 | 12.7 | 27.0        | 22.0   | 11.5   | 1750         | 8.0        | 25  | 9.5         | 50    | FDD2QK356U63PDA7 |
| 900  | 60                      | 56.3       | 63.0 | 12.7 | 34.0        | 27.0   | 14.0   | 3000         | 6.0        | 25  | 8.0         | 50    | FDD2QK606L63PDA7 |
| 1000 | 10                      | 36.0       | 54.0 | 12.7 | 18.0        | 14.0   | 9.0    | 500          | 12.0       | 25  | 10.5        | 50    | FDD3KK106S54PDA7 |
| 1000 | 25                      | 50.0       | 63.0 | 12.7 | 27.0        | 22.0   | 11.5   | 1250         | 8.5        | 25  | 9.5         | 50    | FDD3KK256U63PDA7 |
| 1000 | 50                      | 56.3       | 63.0 | 12.7 | 32.0        | 25.0   | 14.0   | 2500         | 6.5        | 25  | 8.5         | 50    | FDD3KK506L63PDA7 |
| 1200 | 8                       | 36.0       | 54.0 | 12.7 | 16.0        | 12.0   | 8.5    | 400          | 13.5       | 25  | 10.8        | 50    | FDD3BK805S54PDA7 |
| 1200 | 20                      | 50.0       | 63.0 | 12.7 | 26.0        | 21.0   | 11.0   | 1000         | 9.0        | 25  | 9.5         | 50    | FDD3BK206U63PDA7 |
| 1200 | 30                      | 56.3       | 63.0 | 12.7 | 30.0        | 24.0   | 13.0   | 1500         | 7.0        | 25  | 8.0         | 50    | FDD3BK306L63PDA7 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Size Code | OD   | L    | Bulk |
|-----------|------|------|------|
| S54       | 36.0 | 54.0 | 64   |
| U51       | 50.0 | 51.0 | 36   |
| U63       | 50.0 | 63.0 | 36   |
| L63       | 56.3 | 63.0 | 25   |
| 151       | 63.5 | 51.0 | 16   |

## Overview

The FDE capacitor is constructed of segmented metallized polypropylene film in customized PPS case, specially treated to have a very high dielectric strength in operating conditions up to 105°C.

## Applications

Specially design for DC filtering and DC-Link circuits for EV/HEV.

## Features

- Low ESR
- Low ESL
- Self-healing technology
- High ripple current
- UL 94 V-0 PPS Plastic Case
- Automotive Grade (AEC-Q200D)
- THB Grade IIIB

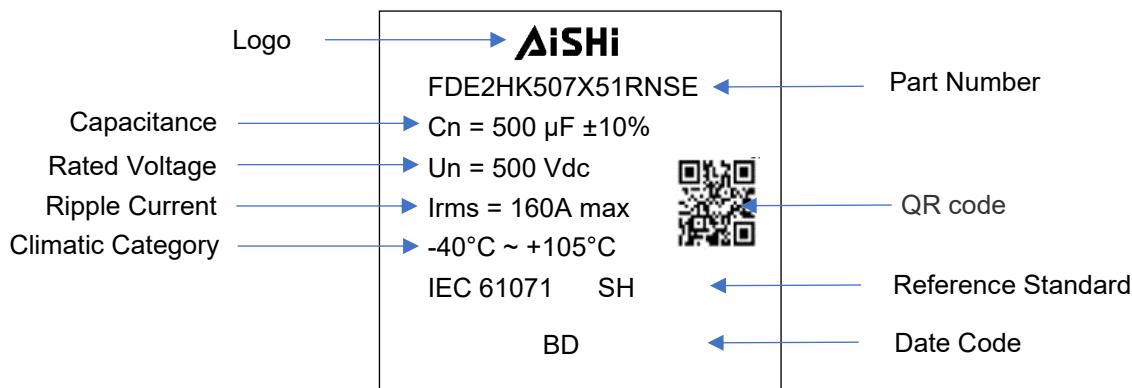


## Qualification

|                    |                       |
|--------------------|-----------------------|
| Reference Standard | IEC 61071, AEC-Q200D  |
| Climate Category   | 40/105/56 IEC 60068-1 |



## Marking



## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Part Number System

| <b>F</b>       | <b>DE</b>  | <b>2H</b>  | <b>K</b>            | <b>507</b>  | <b>X51</b>                          | <b>RNS</b>                   | <b>E</b>      |
|----------------|--|--|---------------------|---|-------------------------------------|------------------------------|---------------|
| Capacitor Type | Series   | Voltage (VDC)  | Tolerance           | Capacitance (pF)  | Case Code                           | Terminal Code                | Internal Code |
| F = Film       | DC Link,<br>Customized<br>PPS Plastic<br>Case,<br>Metallized<br>Segmented<br>PP Film | 450=2W<br>500=2H<br>550=2J<br>600=2K<br>700=2M<br>800=2N<br>900=2Q | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Customized Case Code Table | Refer to Terminal Code Table | Internal Code |

Customized Case Code Table

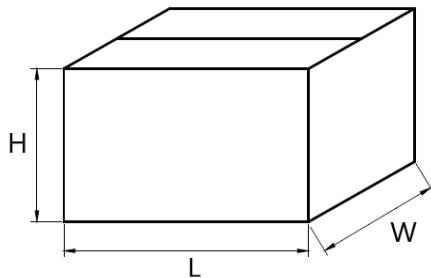
| Drawing Code 1 | Drawing Code 2 | Drawing Code 3 |
|----------------|----------------|----------------|
| A ~ Z          | 0 ~ 9          | 0 ~ 9          |

Terminal Code

| Digit One<br>(Terminal Type) |   | Digit Two<br>(Terminal Space) |   | Digit Three<br>(No. of Terminal) |   |
|------------------------------|---|-------------------------------|---|----------------------------------|---|
| EV Terminal                  | R | N/A                           | N | 2                                | Q |
|                              |   |                               |   | 4                                | R |
|                              |   |                               |   | 6                                | S |
|                              |   |                               |   | 8                                | T |
|                              |   |                               |   | 10                               | U |
|                              |   |                               |   | 12                               | V |
|                              |   |                               |   | 14                               | W |
|                              |   |                               |   | 16                               | X |

## Packaging Information

Capacitors are well protected by foams. And then are packaged in the cartons.



Carton dimensions

| Carton No. | L (mm) | W (mm) | H (mm) |
|------------|--------|--------|--------|
| 1          | 375    | 285    | 235    |
| 2          | 375    | 285    | 300    |
| 3          | 375    | 285    | 330    |
| 4          | 375    | 285    | 365    |
| 5          | 375    | 285    | 265    |

According to the capacitor's diameter, every carton contains capacitors as per the following Table 2.

### Capacitor quantity of each carton

The total quantity of each carton is depended on the dimension of customized capacitor.

## Overview

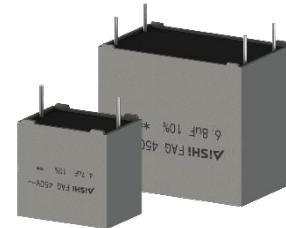
The FAA capacitor is constructed of metallized polypropylene film encapsulated with epoxy resin in a plastic box, with 2 or 4 tinned copper wire.

## Applications

Widely used in Clamping, AC and Harmonic Filtering, UPS Systems, Solar Inverter with LCL Filter and Motor Drive.

## Features

- High ripple current
- Self-healing and low loss
- Optimized AC voltage performance
- Suitable for high frequency applications



## Applicable Standard

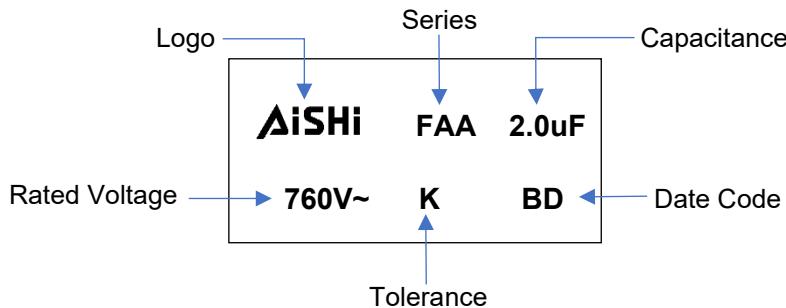
| Approval | Specification | File Number |
|----------|---------------|-------------|
|          | UL 810        | E500537     |



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 180Vac ~ 760Vac  |
| Capacitance Range           | 0.1uF ~60uF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C   |
| Operating Temperature Range | -40°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.35% per °C for Urms)               |
| Climatic Category           | 40/85/56 IEC 60068-1   |
| Dissipation Factor          | ≤ 0.002 (0.20%) at 1 KHz. C≤20uF at +25°C<br>≤ 0.003 (0.30%) at 1 KHz. C>20uF at +25°C |
| Insulation Resistance       | RC between leads, IR xC≥30,000 s at 100vdc 1minute at +25°C                            |

## Marking



## Part Number System

| F              | AA                               | 76   | K                   | 205   | K42                      | 2KL                          | 5                               |
|----------------|----------------------------------|--|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series                           | Voltage (VAC)  | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | AC Filtering, Metallized PP Film | 180=18<br>250=25<br>300=30<br>350=35<br>400=40<br>450=45<br>500=50<br>600=60<br>760=76 | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

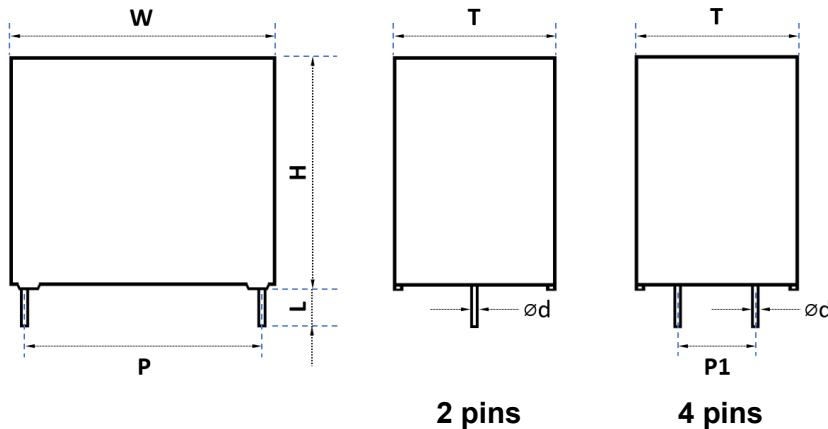
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 27.5mm                    | G | 10.2mm                            | B |
| 2 leads for straight cut          | 2 | 37.5mm                    | K | 12.7mm                            | G |
| 2 leads for forming cut           | E | 52.5mm                    | M | 20.3mm                            | D |
| 4 leads for straight cut          | 4 | N/A                       | N | N/A                               | L |
| 6 leads for straight cut          | 6 |                           |   |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| 20.0mm min  | L |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |    |           | Pitch |           |      |           | Ød      |         |           |
|-----------|-----------|-----------|------|-----------|----|-----------|-------|-----------|------|-----------|---------|---------|-----------|
|           | W         | Tolerance | H    | Tolerance | T  | Tolerance | P     | Tolerance | P1   | Tolerance | 4 Leads | 2 Leads | Tolerance |
| G15       | 32        | 0.8       | 18   | 0.8       | 9  | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G25       | 32        | 0.8       | 24   | 0.8       | 14 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G27       | 32        | 0.8       | 24.5 | 0.8       | 15 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G33       | 32        | 0.8       | 28   | 0.8       | 18 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22 | 0.8       | 27.5  | 0.5       | 10.2 | 0.5       | 1.0     | 0.8     | 0.05      |
| K14       | 42        | 1.0       | 30   | 1.0       | 16 | 1.0       | 37.5  | 0.5       | \    | \         | \       | 1.0     | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19 | 1.0       | 37.5  | 0.5       | \    | \         | \       | 1.0     | 0.05      |
| K27       | 42        | 1.0       | 37   | 1.0       | 22 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K32       | 42        | 1.0       | 44   | 1.0       | 24 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K39       | 42        | 1.0       | 43   | 1.0       | 28 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K42       | 42        | 1.0       | 45   | 1.0       | 30 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.0     | 0.05      |
| K47       | 42        | 1.0       | 50   | 1.0       | 35 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.0     | 0.05      |
| M16       | 57.5      | 1.0       | 45   | 1.0       | 30 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M20       | 57.5      | 1.0       | 50   | 1.0       | 35 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M32       | 57.5      | 1.0       | 55   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M34       | 57.5      | 1.0       | 65   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M47       | 57.5      | 1.0       | 57.5 | 1.0       | 38 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |

# Metalized Polypropylene Film AC Filtering Capacitors

## FAA Series - 180VAC ~ 760VAC



### Rating and Part Number

| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz<br>A 70°C | Peak Current<br>A | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|-------------------------|-------------------|--------------------|---------------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |                         |                   |                    |                                       |           |                     |               |                 |                  |
| 180 | 4.0             | 32         | 22      | 13      | 27.5    | \        | 7.0                     | 300               | 900                | 6.8                                   | 16        | 45.0                | 75            | 0.8             | FAA18K405G212GL5 |
| 180 | 5.0             | 32         | 28      | 18      | 27.5    | \        | 8.0                     | 375               | 1125               | 5.5                                   | 18        | 42.6                | 75            | 0.8             | FAA18K505G332GL5 |
| 180 | 6.8             | 32         | 33      | 18      | 27.5    | \        | 11.0                    | 510               | 1530               | 4.0                                   | 20        | 31.0                | 75            | 0.8             | FAA18K685G342GL5 |
| 180 | 10              | 32         | 37      | 22      | 27.5    | \        | 13.0                    | 750               | 2250               | 2.8                                   | 22        | 31.7                | 75            | 1.0             | FAA18K106G402GL5 |
| 180 | 10              | 42         | 32      | 19      | 37.5    | \        | 10.0                    | 450               | 1350               | 5.0                                   | 24        | 30.0                | 45            | 1.0             | FAA18K106K212KL5 |
| 180 | 15              | 42         | 37      | 22      | 37.5    | \        | 14.0                    | 675               | 2025               | 3.5                                   | 24        | 21.9                | 45            | 1.0             | FAA18K156K274KL5 |
| 180 | 18              | 42         | 44      | 24      | 37.5    | \        | 14.0                    | 810               | 2430               | 2.8                                   | 24        | 27.3                | 45            | 1.0             | FAA18K186K324KL5 |
| 180 | 20              | 42         | 44      | 24      | 37.5    | \        | 15.0                    | 900               | 2700               | 2.5                                   | 24        | 26.7                | 45            | 1.0             | FAA18K206K322KL5 |
| 180 | 22              | 42         | 44      | 24      | 37.5    | \        | 15.0                    | 990               | 2970               | 2.2                                   | 26        | 30.3                | 45            | 1.0             | FAA18K226K322KL5 |
| 180 | 25              | 42         | 45      | 30      | 37.5    | \        | 15.0                    | 1125              | 3375               | 2.0                                   | 26        | 33.3                | 45            | 1.0             | FAA18K256K422KL5 |
| 180 | 30              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0                    | 1350              | 4050               | 1.8                                   | 28        | 25.7                | 45            | 1.2             | FAA18K306K472KL5 |
| 180 | 33              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0                    | 1485              | 4455               | 1.6                                   | 28        | 28.9                | 45            | 1.2             | FAA18K336K472KL5 |
| 180 | 40              | 57.5       | 45      | 30      | 52.5    | 20.3     | 20.0                    | 1000              | 3000               | 2.5                                   | 30        | 15.0                | 25            | 1.2             | FAA18K406M164MD5 |
| 180 | 50              | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.0                    | 1250              | 3750               | 2.2                                   | 32        | 11.8                | 25            | 1.2             | FAA18K506M204MD5 |
| 180 | 60              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 26.0                    | 1500              | 4500               | 1.8                                   | 32        | 12.3                | 25            | 1.2             | FAA18K606M474MD5 |
| 250 | 1.0             | 32         | 18      | 9       | 27.5    | \        | 3.0                     | 90                | 270                | 16.5                                  | 16        | 101.0               | 90            | 0.8             | FAA25K105G152GL5 |
| 250 | 1.5             | 32         | 20      | 11      | 27.5    | \        | 4.0                     | 135               | 405                | 10.5                                  | 16        | 89.3                | 90            | 0.8             | FAA25K155G182GL5 |
| 250 | 2.0             | 32         | 22      | 13      | 27.5    | \        | 5.0                     | 180               | 540                | 8.5                                   | 16        | 70.6                | 90            | 0.8             | FAA25K205G212GL5 |
| 250 | 2.2             | 32         | 22      | 13      | 27.5    | \        | 6.0                     | 198               | 594                | 7.8                                   | 16        | 53.4                | 90            | 0.8             | FAA25K225G212GL5 |
| 250 | 2.5             | 32         | 22      | 13      | 27.5    | \        | 6.0                     | 225               | 675                | 7.5                                   | 16        | 55.6                | 90            | 0.8             | FAA25K255G212GL5 |
| 250 | 3.0             | 32         | 24.5    | 15      | 27.5    | \        | 7.0                     | 270               | 810                | 6.5                                   | 16        | 47.1                | 90            | 0.8             | FAA25K305G272GL5 |
| 250 | 3.3             | 32         | 24.5    | 15      | 27.5    | \        | 8.0                     | 297               | 891                | 6.2                                   | 16        | 37.8                | 90            | 0.8             | FAA25K335G272GL5 |
| 250 | 3.5             | 32         | 28      | 14      | 27.5    | \        | 8.0                     | 315               | 945                | 5.8                                   | 18        | 40.4                | 90            | 0.8             | FAA25K355G262GL5 |
| 250 | 4.0             | 32         | 28      | 18      | 27.5    | \        | 10.0                    | 360               | 1080               | 4.8                                   | 20        | 31.3                | 90            | 0.8             | FAA25K405G332GL5 |
| 250 | 4.5             | 32         | 33      | 18      | 27.5    | \        | 10.0                    | 405               | 1215               | 4.5                                   | 20        | 33.3                | 90            | 0.8             | FAA25K455G342GL5 |
| 250 | 5.0             | 32         | 33      | 18      | 27.5    | \        | 11.0                    | 450               | 1350               | 4.0                                   | 20        | 31.0                | 90            | 0.8             | FAA25K505G342GL5 |
| 250 | 6.8             | 32         | 37      | 22      | 27.5    | \        | 14.0                    | 612               | 1836               | 2.8                                   | 22        | 27.3                | 90            | 1.0             | FAA25K106G402GL5 |
| 250 | 4.7             | 42         | 30      | 16      | 37.5    | \        | 7.0                     | 282               | 846                | 7.5                                   | 24        | 40.8                | 60            | 1.0             | FAA25K475K142KL5 |
| 250 | 5.0             | 42         | 30      | 16      | 37.5    | \        | 8.0                     | 300               | 900                | 7.0                                   | 24        | 33.5                | 60            | 1.0             | FAA25K505K142KL5 |
| 250 | 6.0             | 42         | 30      | 16      | 37.5    | \        | 9.0                     | 360               | 1080               | 6.0                                   | 24        | 30.9                | 60            | 1.0             | FAA25K605K142KL5 |
| 250 | 6.5             | 42         | 30      | 16      | 37.5    | \        | 10.0                    | 390               | 1170               | 5.6                                   | 24        | 26.8                | 60            | 1.0             | FAA25K655K142KL5 |
| 250 | 6.8             | 42         | 32      | 19      | 37.5    | \        | 10.5                    | 408               | 1224               | 5.4                                   | 24        | 25.2                | 60            | 1.0             | FAA25K685K212KL5 |
| 250 | 7.5             | 42         | 32      | 19      | 37.5    | \        | 11.0                    | 450               | 1350               | 5.0                                   | 24        | 24.8                | 60            | 1.0             | FAA25K755K212KL5 |
| 250 | 8.0             | 42         | 37      | 22      | 37.5    | \        | 12.0                    | 480               | 1440               | 4.5                                   | 24        | 23.1                | 60            | 1.0             | FAA25K805K274KL5 |
| 250 | 10              | 42         | 37      | 22      | 37.5    | \        | 13.0                    | 600               | 1800               | 3.6                                   | 24        | 24.7                | 60            | 1.0             | FAA25K106K274KL5 |
| 250 | 12              | 42         | 44      | 24      | 37.5    | \        | 14.0                    | 720               | 2160               | 3.0                                   | 24        | 25.5                | 60            | 1.0             | FAA25K126K324KL5 |
| 250 | 15              | 42         | 44      | 24      | 37.5    | \        | 14.0                    | 900               | 2700               | 2.5                                   | 24        | 30.6                | 60            | 1.0             | FAA25K156K322KL5 |
| 250 | 18              | 42         | 43      | 28      | 37.5    | \        | 15.0                    | 1080              | 3240               | 2.2                                   | 26        | 30.3                | 60            | 1.0             | FAA25K186K392KL5 |
| 250 | 20              | 42         | 45      | 30      | 37.5    | \        | 15.0                    | 1200              | 3600               | 2.0                                   | 26        | 33.3                | 60            | 1.0             | FAA25K206K422KL5 |
| 250 | 22              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0                    | 1320              | 3960               | 1.8                                   | 28        | 25.7                | 60            | 1.2             | FAA25K226K474KD5 |
| 250 | 25              | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.0                    | 750               | 2250               | 3.2                                   | 30        | 14.5                | 30            | 1.2             | FAA25K256M164MD5 |
| 250 | 30              | 57.5       | 45      | 30      | 52.5    | 20.3     | 20.0                    | 900               | 2700               | 2.8                                   | 30        | 13.4                | 30            | 1.2             | FAA25K306M164MD5 |
| 250 | 35              | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.0                    | 1050              | 3150               | 2.4                                   | 32        | 10.9                | 30            | 1.2             | FAA25K356M204MD5 |
| 250 | 40              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 26.0                    | 1200              | 3600               | 2.0                                   | 32        | 11.1                | 30            | 1.2             | FAA25K406M474MD5 |
| 300 | 1.0             | 32         | 20      | 11      | 27.5    | \        | 4.0                     | 90                | 270                | 12.5                                  | 16        | 75.0                | 90            | 0.8             | FAA30K105G182GL5 |
| 300 | 1.5             | 32         | 22      | 13      | 27.5    | \        | 5.0                     | 135               | 405                | 8.5                                   | 16        | 70.6                | 90            | 0.8             | FAA30K155G212GL5 |
| 300 | 2.0             | 32         | 24.5    | 15      | 27.5    | \        | 6.0                     | 180               | 540                | 7.5                                   | 16        | 55.6                | 90            | 0.8             | FAA30K205G272GL5 |
| 300 | 2.2             | 32         | 24.5    | 15      | 27.5    | \        | 7.0                     | 198               | 594                | 6.8                                   | 16        | 45.0                | 90            | 0.8             | FAA30K225G272GL5 |
| 300 | 2.5             | 32         | 28      | 14      | 27.5    | \        | 8.0                     | 225               | 675                | 6.5                                   | 18        | 36.1                | 90            | 0.8             | FAA30K255G262GL5 |
| 300 | 3.0             | 32         | 28      | 18      | 27.5    | \        | 9.0                     | 270               | 810                | 6.0                                   | 20        | 30.9                | 90            | 0.8             | FAA30K305G332GL5 |
| 300 | 3.3             | 32         | 33      | 18      | 27.5    | \        | 10.0                    | 297               | 891                | 4.8                                   | 20        | 31.3                | 90            | 0.8             | FAA30K335G342GL5 |
| 300 | 3.5             | 32         | 33      | 18      | 27.5    | \        | 10.5                    | 315               | 945                | 4.6                                   | 20        | 29.6                | 90            | 0.8             | FAA30K355G342GL5 |
| 300 | 4.0             | 32         | 33      | 18      | 27.5    | \        | 11.0                    | 360               | 1080               | 4.2                                   | 20        | 29.5                | 90            | 0.8             | FAA30K405G342GL5 |
| 300 | 4.7             | 32         | 37      | 22      | 27.5    | \        | 13.0                    | 423               | 1269               | 3.8                                   | 22        | 23.4                | 90            | 1.0             | FAA30K475G402GL5 |
| 300 | 5.0             | 32         | 37      | 22      | 27.5    | \        | 13.5                    | 450               | 1350               | 3.6                                   | 22        | 22.9                | 90            | 1.0             | FAA30K505G402GL5 |
| 300 | 5.6             | 32         | 37      | 22      | 27.5    | \        | 14.0                    | 504               | 1512               | 3.0                                   | 22        | 25.5                | 90            | 1.0             | FAA30K565G402GL5 |

# Metalized Polypropylene Film AC Filtering Capacitors

## FAA Series - 180VAC ~ 760VAC



### Rating and Part Number

| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz<br>A 70°C | Peak Current<br>A | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|-------------------------|-------------------|--------------------|---------------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |                         |                   |                    |                                       |           |                     |               |                 |                  |
| 300 | 3.0             | 42         | 30      | 16      | 37.5    | \        | 6.0                     | 180               | 540                | 9.0                                   | 24        | 46.3                | 60            | 1.0             | FAA30K305K142KL5 |
| 300 | 3.3             | 42         | 30      | 16      | 37.5    | \        | 7.0                     | 198               | 594                | 8.5                                   | 24        | 36.0                | 60            | 1.0             | FAA30K335K142KL5 |
| 300 | 3.5             | 42         | 30      | 16      | 37.5    | \        | 7.0                     | 210               | 630                | 8.0                                   | 24        | 38.3                | 60            | 1.0             | FAA30K355K142KL5 |
| 300 | 4.0             | 42         | 30      | 16      | 37.5    | \        | 8.0                     | 240               | 720                | 6.8                                   | 24        | 34.5                | 60            | 1.0             | FAA30K405K142KL5 |
| 300 | 4.5             | 42         | 30      | 16      | 37.5    | \        | 9.0                     | 270               | 810                | 6.0                                   | 24        | 30.9                | 60            | 1.0             | FAA30K455K142KL5 |
| 300 | 4.7             | 42         | 30      | 16      | 37.5    | \        | 9.0                     | 282               | 846                | 5.8                                   | 24        | 31.9                | 60            | 1.0             | FAA30K475K142KL5 |
| 300 | 5.0             | 42         | 32      | 19      | 37.5    | \        | 10.0                    | 300               | 900                | 5.5                                   | 24        | 27.3                | 60            | 1.0             | FAA30K505K212KL5 |
| 300 | 6.0             | 42         | 32      | 19      | 37.5    | \        | 11.0                    | 360               | 1080               | 5.0                                   | 24        | 24.8                | 60            | 1.0             | FAA30K605K212KL5 |
| 300 | 6.8             | 42         | 37      | 22      | 37.5    | \        | 12.0                    | 408               | 1224               | 4.5                                   | 24        | 23.1                | 60            | 1.0             | FAA30K685K274KL5 |
| 300 | 8.0             | 42         | 37      | 22      | 37.5    | \        | 13.0                    | 480               | 1440               | 3.6                                   | 24        | 24.7                | 60            | 1.0             | FAA30K805K274KL5 |
| 300 | 10              | 42         | 44      | 24      | 37.5    | \        | 14.0                    | 600               | 1800               | 3.0                                   | 24        | 25.5                | 60            | 1.0             | FAA30K106K324KL5 |
| 300 | 12              | 42         | 43      | 28      | 37.5    | \        | 15.0                    | 720               | 2160               | 2.4                                   | 26        | 27.8                | 60            | 1.0             | FAA30K126K392KL5 |
| 300 | 15              | 42         | 45      | 30      | 37.5    | \        | 15.0                    | 900               | 2700               | 2.2                                   | 26        | 30.3                | 60            | 1.0             | FAA30K156K422KL5 |
| 300 | 18              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0                    | 1080              | 3240               | 2.0                                   | 28        | 23.1                | 60            | 1.2             | FAA30K186K474KD5 |
| 300 | 18              | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.0                    | 540               | 1620               | 3.5                                   | 30        | 16.7                | 30            | 1.2             | FAA30K186M164MD5 |
| 300 | 20              | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.0                    | 600               | 1800               | 3.2                                   | 30        | 14.5                | 30            | 1.2             | FAA30K206M164MD5 |
| 300 | 25              | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0                    | 750               | 2250               | 3.0                                   | 32        | 12.5                | 30            | 1.2             | FAA30K256M204MD5 |
| 300 | 30              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 24.0                    | 900               | 2700               | 2.4                                   | 32        | 10.9                | 30            | 1.2             | FAA30K306M474MD5 |
| 350 | 0.33            | 32         | 18      | 9       | 27.5    | \        | 1.5                     | 33                | 99                 | 45.0                                  | 16        | 148.1               | 100           | 0.8             | FAA35K334G152GL5 |
| 350 | 0.39            | 32         | 18      | 9       | 27.5    | \        | 1.6                     | 39                | 117                | 40.0                                  | 16        | 146.5               | 100           | 0.8             | FAA35K394G152GL5 |
| 350 | 0.47            | 32         | 18      | 9       | 27.5    | \        | 2.0                     | 47                | 141                | 35.0                                  | 16        | 107.1               | 100           | 0.8             | FAA35K474G152GL5 |
| 350 | 0.68            | 32         | 20      | 11      | 27.5    | \        | 2.5                     | 68                | 204                | 24.0                                  | 16        | 100.0               | 100           | 0.8             | FAA35K684G182GL5 |
| 350 | 0.82            | 32         | 22      | 13      | 27.5    | \        | 3.0                     | 82                | 246                | 20.5                                  | 16        | 81.3                | 100           | 0.8             | FAA35K824G212GL5 |
| 350 | 1.0             | 32         | 22      | 13      | 27.5    | \        | 3.2                     | 100               | 300                | 15.5                                  | 16        | 94.5                | 100           | 0.8             | FAA35K105G212GL5 |
| 350 | 1.5             | 32         | 24.5    | 15      | 27.5    | \        | 4.0                     | 150               | 450                | 13.0                                  | 16        | 72.1                | 100           | 0.8             | FAA35K155G272GL5 |
| 350 | 2.0             | 32         | 28      | 18      | 27.5    | \        | 4.8                     | 200               | 600                | 10.8                                  | 18        | 60.3                | 100           | 0.8             | FAA35K205G332GL5 |
| 350 | 2.2             | 32         | 28      | 18      | 27.5    | \        | 5.0                     | 220               | 660                | 10.2                                  | 18        | 58.8                | 100           | 0.8             | FAA35K225G332GL5 |
| 350 | 2.5             | 32         | 33      | 18      | 27.5    | \        | 6.0                     | 250               | 750                | 7.0                                   | 20        | 59.5                | 100           | 0.8             | FAA35K255G342GL5 |
| 350 | 3.0             | 32         | 37      | 22      | 27.5    | \        | 7.0                     | 300               | 900                | 5.8                                   | 22        | 52.8                | 100           | 1.0             | FAA35K305G402GL5 |
| 350 | 3.3             | 32         | 37      | 22      | 27.5    | \        | 7.5                     | 330               | 990                | 5.2                                   | 22        | 51.3                | 100           | 1.0             | FAA35K335G402GL5 |
| 350 | 3.5             | 32         | 37      | 22      | 27.5    | \        | 7.8                     | 350               | 1050               | 5.0                                   | 22        | 49.3                | 100           | 1.0             | FAA35K355G402GL5 |
| 350 | 4.0             | 32         | 37      | 22      | 27.5    | \        | 8.0                     | 400               | 1200               | 4.5                                   | 22        | 52.1                | 100           | 1.0             | FAA35K405G402GL5 |
| 350 | 2.0             | 42         | 30      | 16      | 37.5    | \        | 4.5                     | 140               | 420                | 12.8                                  | 24        | 57.9                | 70            | 1.0             | FAA35K205K142KL5 |
| 350 | 2.2             | 42         | 30      | 16      | 37.5    | \        | 4.8                     | 154               | 462                | 12.5                                  | 24        | 52.1                | 70            | 1.0             | FAA35K225K142KL5 |
| 350 | 2.5             | 42         | 30      | 16      | 37.5    | \        | 5.2                     | 175               | 525                | 11.8                                  | 24        | 47.0                | 70            | 1.0             | FAA35K255K142KL5 |
| 350 | 3.0             | 42         | 30      | 16      | 37.5    | \        | 5.5                     | 210               | 630                | 10.8                                  | 24        | 45.9                | 70            | 1.0             | FAA35K305K142KL5 |
| 350 | 3.3             | 42         | 30      | 16      | 37.5    | \        | 6.0                     | 231               | 693                | 8.8                                   | 24        | 47.3                | 70            | 1.0             | FAA35K335K142KL5 |
| 350 | 3.5             | 42         | 30      | 16      | 37.5    | \        | 6.5                     | 245               | 735                | 8.6                                   | 24        | 41.3                | 70            | 1.0             | FAA35K355K142KL5 |
| 350 | 4.0             | 42         | 32      | 19      | 37.5    | \        | 7.0                     | 280               | 840                | 8.0                                   | 24        | 38.3                | 70            | 1.0             | FAA35K405K212KL5 |
| 350 | 4.5             | 42         | 37      | 22      | 37.5    | \        | 8.0                     | 315               | 945                | 7.0                                   | 24        | 33.5                | 70            | 1.0             | FAA35K455K274KL5 |
| 350 | 5.0             | 42         | 37      | 22      | 37.5    | \        | 8.5                     | 350               | 1050               | 6.8                                   | 24        | 30.5                | 70            | 1.0             | FAA35K505K274KL5 |
| 350 | 5.5             | 42         | 37      | 22      | 37.5    | \        | 8.8                     | 385               | 1155               | 6.4                                   | 24        | 30.3                | 70            | 1.0             | FAA35K555K274KL5 |
| 350 | 6.0             | 42         | 44      | 24      | 37.5    | \        | 9.5                     | 420               | 1260               | 6.0                                   | 24        | 27.7                | 70            | 1.0             | FAA35K605K324KL5 |
| 350 | 6.5             | 42         | 44      | 24      | 37.5    | \        | 10.0                    | 455               | 1365               | 5.5                                   | 24        | 27.3                | 70            | 1.0             | FAA35K655K324KL5 |
| 350 | 7.0             | 42         | 44      | 24      | 37.5    | \        | 10.5                    | 490               | 1470               | 5.2                                   | 24        | 26.2                | 70            | 1.0             | FAA35K705K324KL5 |
| 350 | 8.0             | 42         | 44      | 24      | 37.5    | \        | 10.5                    | 560               | 1680               | 5.2                                   | 24        | 26.2                | 70            | 1.0             | FAA35K805K324KL5 |
| 350 | 8.5             | 42         | 43      | 28      | 37.5    | \        | 11.0                    | 595               | 1785               | 4.8                                   | 26        | 25.8                | 70            | 1.0             | FAA35K855K392KL5 |
| 350 | 9.0             | 42         | 43      | 28      | 37.5    | \        | 11.0                    | 630               | 1890               | 4.6                                   | 26        | 26.9                | 70            | 1.0             | FAA35K905K392KL5 |
| 350 | 9.5             | 42         | 45      | 30      | 37.5    | \        | 11.5                    | 665               | 1995               | 4.4                                   | 26        | 25.8                | 70            | 1.0             | FAA35K955K422KL5 |
| 350 | 10              | 42         | 45      | 30      | 37.5    | \        | 12.0                    | 700               | 2100               | 4.2                                   | 26        | 24.8                | 70            | 1.0             | FAA35K106K422KL5 |
| 350 | 12              | 42         | 50      | 35      | 37.5    | 20.3     | 14.0                    | 840               | 2520               | 3.6                                   | 28        | 21.3                | 70            | 1.2             | FAA35K126K474KD5 |
| 350 | 15              | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.5                    | 600               | 1800               | 3.5                                   | 30        | 15.7                | 40            | 1.2             | FAA35K156M164MD5 |
| 350 | 18              | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.0                    | 720               | 2160               | 3.0                                   | 32        | 15.4                | 40            | 1.2             | FAA35K186M204MD5 |
| 350 | 20              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 20.0                    | 800               | 2400               | 2.8                                   | 32        | 13.4                | 40            | 1.2             | FAA35K206M474MD5 |
| 350 | 22              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 22.0                    | 880               | 2640               | 2.6                                   | 32        | 11.9                | 40            | 1.2             | FAA35K226M474MD5 |
| 350 | 25              | 57.5       | 55      | 45      | 52.5    | 20.3     | 24.0                    | 1000              | 3000               | 2.4                                   | 32        | 10.9                | 40            | 1.2             | FAA35K256M324MD5 |

# Metalized Polypropylene Film AC Filtering Capacitors

## FAA Series - 180VAC ~ 760VAC



### Rating and Part Number

| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 350 | 30              | 57.5       | 65      | 45      | 52.5    | 20.3     | 26.0          | 1200         | 3600          | 2.2                             | 32  | 10.1        | 40    | 1.2       | FAA35K306M344MD5 |
| 400 | 0.33            | 32         | 18      | 9       | 27.5    | \        | 1.5           | 40           | 119           | 45.0                            | 16  | 148.1       | 120   | 0.8       | FAA40K334G152GL5 |
| 400 | 0.39            | 32         | 18      | 9       | 27.5    | \        | 1.6           | 47           | 140           | 40.0                            | 16  | 146.5       | 120   | 0.8       | FAA40K394G152GL5 |
| 400 | 0.47            | 32         | 18      | 9       | 27.5    | \        | 2.0           | 56           | 169           | 35.0                            | 16  | 107.1       | 120   | 0.8       | FAA40K474G152GL5 |
| 400 | 0.68            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 82           | 245           | 24.0                            | 16  | 100.0       | 120   | 0.8       | FAA40K684G182GL5 |
| 400 | 0.82            | 32         | 22      | 13      | 27.5    | \        | 3.0           | 98           | 295           | 20.5                            | 16  | 81.3        | 120   | 0.8       | FAA40K824G212GL5 |
| 400 | 1.0             | 32         | 24      | 14      | 27.5    | \        | 3.2           | 120          | 360           | 15.5                            | 16  | 94.5        | 120   | 0.8       | FAA40K105G252GL5 |
| 400 | 1.5             | 32         | 28      | 18      | 27.5    | \        | 4.8           | 180          | 540           | 10.8                            | 18  | 60.3        | 120   | 0.8       | FAA40K155G332GL5 |
| 400 | 2.0             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 240          | 720           | 7.0                             | 20  | 59.5        | 120   | 0.8       | FAA40K205G342GL5 |
| 400 | 2.2             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 264          | 792           | 7.0                             | 20  | 59.5        | 120   | 0.8       | FAA40K225G342GL5 |
| 400 | 2.5             | 32         | 37      | 22      | 27.5    | \        | 7.0           | 300          | 900           | 5.8                             | 22  | 52.8        | 120   | 1.0       | FAA40K255G402GL5 |
| 400 | 3.0             | 32         | 37      | 22      | 27.5    | \        | 7.5           | 360          | 1080          | 5.2                             | 22  | 51.3        | 120   | 1.0       | FAA40K305G402GL5 |
| 400 | 2.0             | 42         | 30      | 16      | 37.5    | \        | 4.5           | 160          | 480           | 12.8                            | 24  | 57.9        | 80    | 1.0       | FAA40K205K142KL5 |
| 400 | 2.2             | 42         | 30      | 16      | 37.5    | \        | 4.8           | 176          | 528           | 12.5                            | 24  | 52.1        | 80    | 1.0       | FAA40K225K142KL5 |
| 400 | 2.5             | 42         | 30      | 16      | 37.5    | \        | 5.2           | 200          | 600           | 11.8                            | 24  | 47.0        | 80    | 1.0       | FAA40K255K142KL5 |
| 400 | 3.0             | 42         | 32      | 19      | 37.5    | \        | 6.0           | 240          | 720           | 8.8                             | 24  | 47.3        | 80    | 1.0       | FAA40K305K212KL5 |
| 400 | 3.3             | 42         | 32      | 19      | 37.5    | \        | 6.5           | 264          | 792           | 8.6                             | 24  | 41.3        | 80    | 1.0       | FAA40K335K212KL5 |
| 400 | 3.5             | 42         | 37      | 22      | 37.5    | \        | 7.0           | 280          | 840           | 8.0                             | 24  | 38.3        | 80    | 1.0       | FAA40K355K274KL5 |
| 400 | 4.0             | 42         | 37      | 22      | 37.5    | \        | 8.0           | 320          | 960           | 7.0                             | 24  | 33.5        | 80    | 1.0       | FAA40K405K274KL5 |
| 400 | 4.5             | 42         | 37      | 22      | 37.5    | \        | 8.5           | 360          | 1080          | 6.8                             | 24  | 30.5        | 80    | 1.0       | FAA40K455K274KL5 |
| 400 | 5.0             | 42         | 44      | 24      | 37.5    | \        | 9.5           | 400          | 1200          | 6.0                             | 24  | 27.7        | 80    | 1.0       | FAA40K505K324KL5 |
| 400 | 5.5             | 42         | 44      | 24      | 37.5    | \        | 10.0          | 440          | 1320          | 5.5                             | 24  | 27.3        | 80    | 1.0       | FAA40K555K324KL5 |
| 400 | 6.0             | 42         | 43      | 28      | 37.5    | \        | 10.5          | 480          | 1440          | 4.8                             | 26  | 28.3        | 80    | 1.0       | FAA40K605K392KL5 |
| 400 | 6.5             | 42         | 43      | 28      | 37.5    | \        | 10.5          | 520          | 1560          | 4.6                             | 26  | 29.6        | 80    | 1.0       | FAA40K655K392KL5 |
| 400 | 7.0             | 42         | 43      | 28      | 37.5    | \        | 11.0          | 560          | 1680          | 4.4                             | 26  | 28.2        | 80    | 1.0       | FAA40K705K392KL5 |
| 400 | 7.5             | 42         | 45      | 30      | 37.5    | \        | 11.0          | 600          | 1800          | 4.4                             | 26  | 28.2        | 80    | 1.0       | FAA40K755K422KL5 |
| 400 | 8.0             | 42         | 45      | 30      | 37.5    | \        | 11.5          | 640          | 1920          | 4.2                             | 26  | 27.0        | 80    | 1.0       | FAA40K805K422KL5 |
| 400 | 9.0             | 42         | 50      | 35      | 37.5    | 20.3     | 12.5          | 720          | 2160          | 4.0                             | 28  | 24.0        | 80    | 1.2       | FAA40K905K474KD5 |
| 400 | 10              | 42         | 50      | 35      | 37.5    | 20.3     | 14.0          | 800          | 2400          | 3.6                             | 28  | 21.3        | 80    | 1.2       | FAA40K106K474KD5 |
| 400 | 10              | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5          | 500          | 1500          | 4.2                             | 30  | 22.9        | 50    | 1.2       | FAA40K106M164MD5 |
| 400 | 12              | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.0          | 600          | 1800          | 3.8                             | 32  | 20.1        | 50    | 1.2       | FAA40K126M204MD5 |
| 400 | 14              | 57.5       | 50      | 35      | 52.5    | 20.3     | 16.0          | 700          | 2100          | 3.6                             | 32  | 16.3        | 50    | 1.2       | FAA40K146M204MD5 |
| 400 | 18              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 20.0          | 900          | 2700          | 3.0                             | 32  | 12.5        | 50    | 1.2       | FAA40K186M474MD5 |
| 400 | 20              | 57.5       | 55      | 45      | 52.5    | 20.3     | 22.0          | 1000         | 3000          | 2.8                             | 32  | 11.1        | 50    | 1.2       | FAA40K206M324MD5 |
| 400 | 22              | 57.5       | 65      | 45      | 52.5    | 20.3     | 24.0          | 1100         | 3300          | 2.5                             | 32  | 10.4        | 50    | 1.2       | FAA40K226M344MD5 |
| 400 | 25              | 57.5       | 65      | 45      | 52.5    | 20.3     | 26.0          | 1250         | 3750          | 2.2                             | 32  | 10.1        | 50    | 1.2       | FAA40K256M344MD5 |
| 500 | 0.22            | 32         | 18      | 9       | 27.5    | \        | 1.5           | 31           | 92            | 45.0                            | 16  | 148.1       | 140   | 0.8       | FAA50K224G152GL5 |
| 500 | 0.27            | 32         | 18      | 9       | 27.5    | \        | 1.6           | 38           | 113           | 40.0                            | 16  | 146.5       | 140   | 0.8       | FAA50K274G152GL5 |
| 500 | 0.33            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 46           | 139           | 24.0                            | 16  | 100.0       | 140   | 0.8       | FAA50K334G182GL5 |
| 500 | 0.39            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 55           | 164           | 24.0                            | 16  | 100.0       | 140   | 0.8       | FAA50K394G182GL5 |
| 500 | 0.47            | 32         | 22      | 13      | 27.5    | \        | 2.8           | 66           | 197           | 21.5                            | 16  | 89.0        | 140   | 0.8       | FAA50K474G212GL5 |
| 500 | 0.56            | 32         | 22      | 13      | 27.5    | \        | 3.0           | 78           | 235           | 20.5                            | 16  | 81.3        | 140   | 0.8       | FAA50K564G212GL5 |
| 500 | 0.68            | 32         | 24.5    | 15      | 27.5    | \        | 3.5           | 95           | 286           | 15.5                            | 16  | 79.0        | 140   | 0.8       | FAA50K684G272GL5 |
| 500 | 0.82            | 32         | 28      | 18      | 27.5    | \        | 4.8           | 115          | 344           | 12.5                            | 18  | 52.1        | 140   | 0.8       | FAA50K824G332GL5 |
| 500 | 1.0             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 140          | 420           | 9.0                             | 20  | 46.3        | 140   | 0.8       | FAA50K105G342GL5 |
| 500 | 1.2             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 168          | 504           | 9.0                             | 20  | 46.3        | 140   | 0.8       | FAA50K125G342GL5 |
| 500 | 1.5             | 32         | 37      | 22      | 27.5    | \        | 7.0           | 210          | 630           | 8.5                             | 22  | 36.0        | 140   | 1.0       | FAA50K155G402GL5 |
| 500 | 1.8             | 32         | 37      | 22      | 27.5    | \        | 7.5           | 252          | 756           | 7.8                             | 22  | 34.2        | 140   | 1.0       | FAA50K185G402GL5 |
| 500 | 1.0             | 42         | 30      | 16      | 37.5    | \        | 4.5           | 90           | 270           | 12.8                            | 24  | 57.9        | 90    | 1.0       | FAA50K105K142KL5 |
| 500 | 1.2             | 42         | 30      | 16      | 37.5    | \        | 4.8           | 108          | 324           | 12.5                            | 24  | 52.1        | 90    | 1.0       | FAA50K125K142KL5 |
| 500 | 1.5             | 42         | 30      | 16      | 37.5    | \        | 5.2           | 135          | 405           | 11.8                            | 24  | 47.0        | 90    | 1.0       | FAA50K155K142KL5 |
| 500 | 1.8             | 42         | 32      | 19      | 37.5    | \        | 6.0           | 162          | 486           | 9.0                             | 24  | 46.3        | 90    | 1.0       | FAA50K185K212KL5 |
| 500 | 2.0             | 42         | 32      | 19      | 37.5    | \        | 6.5           | 180          | 540           | 8.6                             | 24  | 41.3        | 90    | 1.0       | FAA50K205K212KL5 |
| 500 | 2.5             | 42         | 37      | 22      | 37.5    | \        | 7.0           | 225          | 675           | 8.0                             | 24  | 38.3        | 90    | 1.0       | FAA50K255K274KL5 |
| 500 | 2.8             | 42         | 37      | 22      | 37.5    | \        | 8.0           | 252          | 756           | 7.0                             | 24  | 33.5        | 90    | 1.0       | FAA50K285K274KL5 |
| 500 | 3.0             | 42         | 37      | 22      | 37.5    | \        | 8.5           | 270          | 810           | 6.8                             | 24  | 30.5        | 90    | 1.0       | FAA50K305K274KL5 |

# Metalized Polypropylene Film AC Filtering Capacitors

## FAA Series - 180VAC ~ 760VAC

### Rating and Part Number

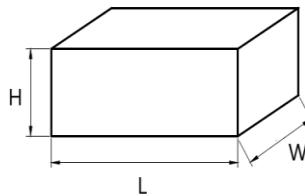
| Vac | Cap Value $\mu\text{F}$ | Dimensions |      |      |      |       | Irms 10KHz | Peak Current A 70°C | Surge Current A | ESR <sub>Typical</sub> 10KHz mΩ | ESL nH | Thermal Res °C/W | dv/dt V/us | Lead Wire mm | Part Number      |
|-----|-------------------------|------------|------|------|------|-------|------------|---------------------|-----------------|---------------------------------|--------|------------------|------------|--------------|------------------|
|     |                         | W mm       | H mm | T mm | P mm | P1 mm |            |                     |                 |                                 |        |                  |            |              |                  |
| 500 | 3.5                     | 42         | 44   | 24   | 37.5 | \     | 9.5        | 315                 | 945             | 6.0                             | 24     | 27.7             | 90         | 1.0          | FAA50K355K324KL5 |
| 500 | 4.0                     | 42         | 43   | 28   | 37.5 | \     | 10.5       | 360                 | 1080            | 4.8                             | 26     | 28.3             | 90         | 1.0          | FAA50K405K392KL5 |
| 500 | 4.5                     | 42         | 43   | 28   | 37.5 | \     | 10.5       | 405                 | 1215            | 4.8                             | 26     | 28.3             | 90         | 1.0          | FAA50K455K392KL5 |
| 500 | 5.0                     | 42         | 45   | 30   | 37.5 | \     | 11.0       | 450                 | 1350            | 4.5                             | 26     | 27.5             | 90         | 1.0          | FAA50K505K422KL5 |
| 500 | 5.5                     | 42         | 50   | 35   | 37.5 | 20.3  | 12.5       | 495                 | 1485            | 4.2                             | 28     | 22.9             | 90         | 1.2          | FAA50K555K474KD5 |
| 500 | 6.0                     | 42         | 50   | 35   | 37.5 | 20.3  | 14.0       | 540                 | 1620            | 3.8                             | 28     | 20.1             | 90         | 1.2          | FAA50K605K474KD5 |
| 500 | 7.0                     | 57.5       | 45   | 30   | 52.5 | 20.3  | 12.5       | 420                 | 1260            | 4.2                             | 30     | 22.9             | 60         | 1.2          | FAA50K705M164MD5 |
| 500 | 8.0                     | 57.5       | 50   | 35   | 52.5 | 20.3  | 14.0       | 480                 | 1440            | 3.8                             | 32     | 20.1             | 60         | 1.2          | FAA50K805M204MD5 |
| 500 | 9.0                     | 57.5       | 50   | 35   | 52.5 | 20.3  | 16.0       | 540                 | 1620            | 3.6                             | 32     | 16.3             | 60         | 1.2          | FAA50K905M204MD5 |
| 500 | 10                      | 57.5       | 57.5 | 38   | 52.5 | 20.3  | 18.0       | 600                 | 1800            | 3.4                             | 32     | 13.6             | 60         | 1.2          | FAA50K106M474MD5 |
| 500 | 12                      | 57.5       | 57.5 | 38   | 52.5 | 20.3  | 20.0       | 720                 | 2160            | 3.2                             | 32     | 11.7             | 60         | 1.2          | FAA50K126M474MD5 |
| 500 | 15                      | 57.5       | 65   | 45   | 52.5 | 20.3  | 22.0       | 900                 | 2700            | 3.0                             | 32     | 10.3             | 60         | 1.2          | FAA50K156M344MD5 |
| 600 | 0.15                    | 32         | 18   | 9    | 27.5 | \     | 1.5        | 24                  | 72              | 45.0                            | 16     | 148.1            | 160        | 0.8          | FAA60K154G152GL5 |
| 600 | 0.22                    | 32         | 20   | 11   | 27.5 | \     | 2.5        | 35                  | 106             | 24.0                            | 16     | 100.0            | 160        | 0.8          | FAA60K224G182GL5 |
| 600 | 0.33                    | 32         | 22   | 13   | 27.5 | \     | 2.8        | 53                  | 158             | 21.5                            | 16     | 89.0             | 160        | 0.8          | FAA60K334G212GL5 |
| 600 | 0.47                    | 32         | 24.5 | 15   | 27.5 | \     | 3.2        | 75                  | 226             | 15.5                            | 16     | 94.5             | 160        | 0.8          | FAA60K474G272GL5 |
| 600 | 0.56                    | 32         | 28   | 14   | 27.5 | \     | 4.0        | 90                  | 269             | 12.5                            | 18     | 75.0             | 160        | 0.8          | FAA60K564G262GL5 |
| 600 | 0.68                    | 32         | 28   | 18   | 27.5 | \     | 4.8        | 109                 | 326             | 10.8                            | 18     | 60.3             | 160        | 0.8          | FAA60K684G332GL5 |
| 600 | 0.82                    | 32         | 33   | 18   | 27.5 | \     | 6.0        | 131                 | 394             | 7.0                             | 20     | 59.5             | 160        | 0.8          | FAA60K824G342GL5 |
| 600 | 1.0                     | 32         | 33   | 18   | 27.5 | \     | 6.0        | 160                 | 480             | 7.0                             | 20     | 59.5             | 160        | 0.8          | FAA60K105G342GL5 |
| 600 | 1.2                     | 32         | 37   | 22   | 27.5 | \     | 7.0        | 192                 | 576             | 5.8                             | 22     | 52.8             | 160        | 1.0          | FAA60K125G402GL5 |
| 600 | 1.0                     | 42         | 30   | 16   | 37.5 | \     | 4.5        | 100                 | 300             | 12.8                            | 24     | 57.9             | 100        | 1.0          | FAA60K105K142KL5 |
| 600 | 1.2                     | 42         | 32   | 19   | 37.5 | \     | 6.0        | 120                 | 360             | 8.8                             | 24     | 47.3             | 100        | 1.0          | FAA60K125K212KL5 |
| 600 | 1.5                     | 42         | 32   | 19   | 37.5 | \     | 6.5        | 150                 | 450             | 8.6                             | 24     | 41.3             | 100        | 1.0          | FAA60K155K212KL5 |
| 600 | 1.8                     | 42         | 37   | 22   | 37.5 | \     | 7.0        | 180                 | 540             | 8.0                             | 24     | 38.3             | 100        | 1.0          | FAA60K185K274KL5 |
| 600 | 2.0                     | 42         | 37   | 22   | 37.5 | \     | 8.0        | 200                 | 600             | 7.0                             | 24     | 33.5             | 100        | 1.0          | FAA60K205K274KL5 |
| 600 | 2.2                     | 42         | 44   | 24   | 37.5 | \     | 9.0        | 220                 | 660             | 6.5                             | 24     | 28.5             | 100        | 1.0          | FAA60K225K324KL5 |
| 600 | 2.5                     | 42         | 44   | 24   | 37.5 | \     | 9.5        | 250                 | 750             | 6.0                             | 24     | 27.7             | 100        | 1.0          | FAA60K255K324KL5 |
| 600 | 2.8                     | 42         | 43   | 28   | 37.5 | \     | 10.0       | 280                 | 840             | 5.5                             | 26     | 27.3             | 100        | 1.0          | FAA60K285K392KL5 |
| 600 | 3.0                     | 42         | 45   | 30   | 37.5 | \     | 10.5       | 300                 | 900             | 5.0                             | 26     | 27.2             | 100        | 1.0          | FAA60K305K422KL5 |
| 600 | 3.5                     | 42         | 50   | 35   | 37.5 | 20.3  | 12.5       | 350                 | 1050            | 4.5                             | 28     | 21.3             | 100        | 1.2          | FAA60K335K474KD5 |
| 600 | 4.0                     | 42         | 50   | 35   | 37.5 | 20.3  | 14.0       | 400                 | 1200            | 4.0                             | 28     | 19.1             | 100        | 1.2          | FAA60K405K474KD5 |
| 600 | 4.5                     | 57.5       | 45   | 30   | 52.5 | 20.3  | 12.5       | 315                 | 945             | 4.5                             | 30     | 21.3             | 70         | 1.2          | FAA60K455M164MD5 |
| 600 | 5.0                     | 57.5       | 45   | 30   | 52.5 | 20.3  | 13.5       | 350                 | 1050            | 4.2                             | 30     | 19.6             | 70         | 1.2          | FAA60K505M164MD5 |
| 600 | 6.0                     | 57.5       | 50   | 35   | 52.5 | 20.3  | 14.0       | 420                 | 1260            | 4.0                             | 32     | 19.1             | 70         | 1.2          | FAA60K605M204MD5 |
| 600 | 6.5                     | 57.5       | 50   | 35   | 52.5 | 20.3  | 16.0       | 455                 | 1365            | 3.8                             | 32     | 15.4             | 70         | 1.2          | FAA60K655M204MD5 |
| 600 | 7.0                     | 57.5       | 57.5 | 38   | 52.5 | 20.3  | 18.0       | 490                 | 1470            | 3.6                             | 32     | 12.9             | 70         | 1.2          | FAA60K705M474MD5 |
| 600 | 7.5                     | 57.5       | 57.5 | 38   | 52.5 | 20.3  | 19.0       | 525                 | 1575            | 3.4                             | 32     | 12.2             | 70         | 1.2          | FAA60K755M474MD5 |
| 600 | 8.0                     | 57.5       | 57.5 | 38   | 52.5 | 20.3  | 20.0       | 560                 | 1680            | 3.2                             | 32     | 11.7             | 70         | 1.2          | FAA60K805M474MD5 |
| 600 | 10                      | 57.5       | 65   | 45   | 52.5 | 20.3  | 22.0       | 700                 | 2100            | 3.0                             | 32     | 10.3             | 70         | 1.2          | FAA60K106M344MD5 |
| 760 | 0.1                     | 32         | 18   | 9    | 27.5 | \     | 1.5        | 20                  | 60              | 45.0                            | 16     | 148.1            | 200        | 0.8          | FAA76K104G152GL5 |
| 760 | 0.15                    | 32         | 20   | 11   | 27.5 | \     | 2.5        | 30                  | 90              | 24.0                            | 16     | 100.0            | 200        | 0.8          | FAA76K154G182GL5 |
| 760 | 0.22                    | 32         | 22   | 13   | 27.5 | \     | 2.8        | 44                  | 132             | 21.5                            | 16     | 89.0             | 200        | 0.8          | FAA76K224G212GL5 |
| 760 | 0.33                    | 32         | 24.5 | 15   | 27.5 | \     | 3.2        | 66                  | 198             | 15.5                            | 16     | 94.5             | 200        | 0.8          | FAA76K334G272GL5 |
| 760 | 0.47                    | 32         | 28   | 18   | 27.5 | \     | 4.5        | 94                  | 282             | 12.0                            | 18     | 61.7             | 200        | 0.8          | FAA76K474G332GL5 |
| 760 | 0.56                    | 32         | 33   | 18   | 27.5 | \     | 5.0        | 112                 | 336             | 10.5                            | 20     | 57.1             | 200        | 0.8          | FAA76K564G342GL5 |
| 760 | 0.68                    | 32         | 37   | 22   | 27.5 | \     | 6.0        | 136                 | 408             | 9.5                             | 22     | 43.9             | 200        | 1.0          | FAA76K684G402GL5 |
| 760 | 0.68                    | 42         | 30   | 16   | 37.5 | \     | 4.5        | 82                  | 245             | 12.8                            | 24     | 57.9             | 120        | 1.0          | FAA76K684K142KL5 |
| 760 | 0.82                    | 42         | 32   | 19   | 37.5 | \     | 5.5        | 98                  | 295             | 10.0                            | 24     | 49.6             | 120        | 1.0          | FAA76K824K212KL5 |
| 760 | 1.0                     | 42         | 32   | 19   | 37.5 | \     | 6.5        | 120                 | 360             | 9.0                             | 24     | 39.4             | 120        | 1.0          | FAA76K105K212KL5 |
| 760 | 1.2                     | 42         | 37   | 22   | 37.5 | \     | 7.0        | 144                 | 432             | 8.5                             | 24     | 36.0             | 120        | 1.0          | FAA76K125K274KL5 |
| 760 | 1.5                     | 42         | 44   | 24   | 37.5 | \     | 8.0        | 180                 | 540             | 7.5                             | 24     | 31.3             | 120        | 1.0          | FAA76K155K324KL5 |
| 760 | 1.8                     | 42         | 43   | 28   | 37.5 | \     | 9.5        | 216                 | 648             | 6.5                             | 26     | 25.6             | 120        | 1.0          | FAA76K185K392KL5 |
| 760 | 2.0                     | 42         | 45   | 30   | 37.5 | \     | 10.5       | 240                 | 720             | 5.0                             | 26     | 27.2             | 120        | 1.0          | FAA76K205K422KL5 |
| 760 | 2.5                     | 42         | 50   | 35   | 37.5 | 20.3  | 12.5       | 300                 | 900             | 4.5                             | 28     | 21.3             | 120        | 1.2          | FAA76K255K474KD5 |
| 760 | 3.0                     | 57.5       | 45   | 30   | 52.5 | 20.3  | 12.5       | 240                 | 720             | 4.5                             | 30     | 21.3             | 80         | 1.2          | FAA76K305M164MD5 |

### Rating and Part Number

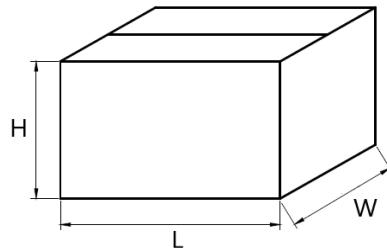
| Vac | Cap Value<br>$\mu\text{F}$ | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|----------------------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                            | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
|     |                            | A          | 70°C    | A       | A       | mΩ       | nH            | °C/W         | V/us          | mm                              |     |             |       |           |                  |
| 760 | 4.0                        | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.0          | 320          | 960           | 4.0                             | 32  | 19.1        | 80    | 1.2       | FAA76K405M204MD5 |
| 760 | 5.0                        | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 16.0          | 400          | 1200          | 3.6                             | 32  | 16.3        | 80    | 1.2       | FAA76K505M474MD5 |
| 760 | 6.0                        | 57.5       | 55      | 45      | 52.5    | 20.3     | 18.0          | 480          | 1440          | 3.4                             | 32  | 13.6        | 80    | 1.2       | FAA76K605M324MD5 |
| 760 | 7.0                        | 57.5       | 65      | 45      | 52.5    | 20.3     | 20.0          | 560          | 1680          | 3.2                             | 32  | 11.7        | 80    | 1.2       | FAA76K705M344MD5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |    | Packaging Quantity |             |
|-------|-----------|-----------|------|----|--------------------|-------------|
|       |           | W         | H    | T  | Long Leads         | Short Leads |
| 27.5  | G15       | 32        | 18   | 9  | 340                | 340         |
|       | G18       | 32        | 20   | 11 | 280                | 280         |
|       | G21       | 32        | 22   | 13 | 230                | 230         |
|       | G25       | 32        | 24   | 14 | 220                | 220         |
|       | G26       | 32        | 28   | 14 | 220                | 220         |
|       | G27       | 32        | 24.5 | 15 | 200                | 200         |
|       | G33       | 32        | 28   | 18 | 170                | 170         |
|       | G34       | 32        | 33   | 18 | 170                | 170         |
|       | G40       | 32        | 37   | 22 | 140                | 140         |
| 37.5  | K14       | 42        | 30   | 16 | 133                | 133         |
|       | K21       | 42        | 32   | 19 | 112                | 112         |
|       | K27       | 42        | 37   | 22 | 98                 | 98          |
|       | K32       | 42        | 44   | 24 | 91                 | 91          |
|       | K39       | 42        | 43   | 28 | 77                 | 77          |
|       | K42       | 42        | 45   | 30 | 70                 | 70          |
|       | K47       | 42        | 50   | 35 | 63                 | 63          |
| 52.5  | M16       | 57.5      | 45   | 30 | 50                 | 50          |
|       | M20       | 57.5      | 50   | 35 | 45                 | 45          |
|       | M32       | 57.5      | 55   | 45 | 35                 | 35          |
|       | M34       | 57.5      | 65   | 45 | 35                 | 35          |
|       | M47       | 57.5      | 57.5 | 38 | 40                 | 40          |

## Overview

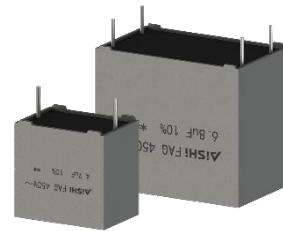
The FAG capacitor is constructed of metallized polypropylene film encapsulated with epoxy resin in a plastic box, with 2 or 4 tinned copper wire. These FAG series are suitable for harsh environment conditions and compliant to THB Grade IIIB.

## Features

- High ripple current
- Self-healing and low loss
- Optimized AC voltage performance
- Suitable for high frequency applications
- Suitable for harsh environment conditions.
- THB Grade IIIB (85°C, 85% RH, 1000h at  $U_{RAC}$ )

## Applications

Widely used in Clamping, AC and Harmonic Filtering, UPS Systems, Solar Inverter with LCL Filter and Motor Drive.



## Applicable Standard

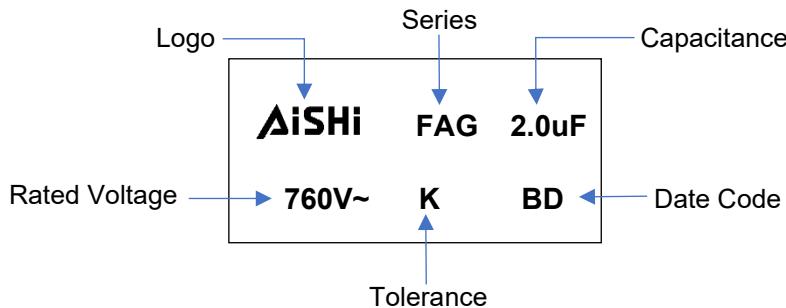
| Approval | Specification | File Number |
|----------|---------------|-------------|
|          | UL 810        | E500537     |



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 180Vac ~ 760Vac  |
| Capacitance Range           | 0.1uF ~60uF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C   |
| Operating Temperature Range | -55°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.35% per °C for Urms)               |
| Climatic Category           | 55/105/56 IEC 60068-1  |
| Dissipation Factor          | ≤ 0.002 (0.20%) at 1 KHz. C≤20uF at +25°C<br>≤ 0.003 (0.30%) at 1 KHz. C>20uF at +25°C |
| Insulation Resistance       | RC between leads, IR xC≥30,000 s at 100vdc 1minute at +25°C                            |

## Marking



## Part Number System

| <b>F</b>       | <b>AG</b>                                  | <b>76</b>  | <b>K</b>            | <b>205</b>  | <b>K42</b>               | <b>2KL</b>                   | <b>5</b>                        |
|----------------|--|--|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series                                     | Voltage (VAC)  | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | AC Filtering, THB Type, Metallized PP Film | 180=18<br>250=25<br>300=30<br>350=35<br>400=40<br>450=45<br>500=50<br>600=60<br>760=76 | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

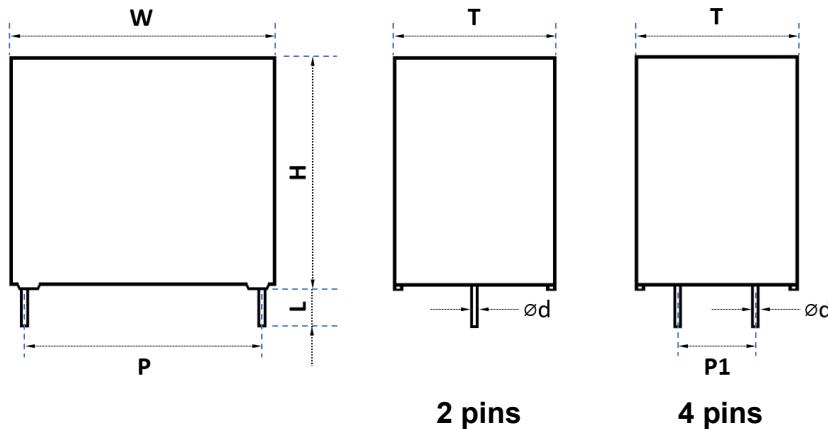
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead IpsiLateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 27.5mm                    | G | 10.2mm                            | B |
| 2 leads for straight cut          | 2 | 37.5mm                    | K | 12.7mm                            | G |
| 2 leads for forming cut           | E | 52.5mm                    | M | 20.3mm                            | D |
| 4 leads for straight cut          | 4 | N/A                       | N | N/A                               | L |
| 6 leads for straight cut          | 6 |                           |   |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| 20.0mm min  | L |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |    |           | Pitch |           |      |           | Ød      |         |           |
|-----------|-----------|-----------|------|-----------|----|-----------|-------|-----------|------|-----------|---------|---------|-----------|
|           | W         | Tolerance | H    | Tolerance | T  | Tolerance | P     | Tolerance | P1   | Tolerance | 4 Leads | 2 Leads | Tolerance |
| G15       | 32        | 0.8       | 18   | 0.8       | 9  | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G25       | 32        | 0.8       | 24   | 0.8       | 14 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G27       | 32        | 0.8       | 24.5 | 0.8       | 15 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G33       | 32        | 0.8       | 28   | 0.8       | 18 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18 | 0.8       | 27.5  | 0.5       | \    | \         | \       | 0.8     | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22 | 0.8       | 27.5  | 0.5       | 10.2 | 0.5       | 1.0     | 1.0     | 0.05      |
| K14       | 42        | 1.0       | 30   | 1.0       | 16 | 1.0       | 37.5  | 0.5       | \    | \         | \       | 1.0     | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19 | 1.0       | 37.5  | 0.5       | \    | \         | \       | 1.0     | 0.05      |
| K27       | 42        | 1.0       | 37   | 1.0       | 22 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K32       | 42        | 1.0       | 44   | 1.0       | 24 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K39       | 42        | 1.0       | 43   | 1.0       | 28 | 1.0       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2     | 1.0     | 0.05      |
| K42       | 42        | 1.0       | 45   | 1.0       | 30 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.0     | 0.05      |
| K47       | 42        | 1.0       | 50   | 1.0       | 35 | 1.0       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.0     | 0.05      |
| M16       | 57.5      | 1.0       | 45   | 1.0       | 30 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M20       | 57.5      | 1.0       | 50   | 1.0       | 35 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M32       | 57.5      | 1.0       | 55   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M34       | 57.5      | 1.0       | 65   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |
| M47       | 57.5      | 1.0       | 57.5 | 1.0       | 38 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2     | 1.2     | 0.05      |

# Metalized Polypropylene Film AC Filtering Capacitors

## FAG Series - 180VAC ~ 760VAC, THB Grade IIIB



### Rating and Part Number

| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 180 | 4.0             | 32         | 22      | 13      | 27.5    | \        | 7.0           | 300          | 900           | 6.8                             | 16  | 45.0        | 75    | 0.8       | FAG18K405G212GL5 |
| 180 | 5.0             | 32         | 28      | 18      | 27.5    | \        | 8.0           | 375          | 1125          | 5.5                             | 18  | 42.6        | 75    | 0.8       | FAG18K505G332GL5 |
| 180 | 6.8             | 32         | 33      | 18      | 27.5    | \        | 11.0          | 510          | 1530          | 4.0                             | 20  | 31.0        | 75    | 0.8       | FAG18K685G342GL5 |
| 180 | 10              | 32         | 37      | 22      | 27.5    | \        | 13.0          | 750          | 2250          | 2.8                             | 22  | 31.7        | 75    | 1.0       | FAG18K106G402GL5 |
| 180 | 10              | 42         | 32      | 19      | 37.5    | \        | 10.0          | 450          | 1350          | 5.0                             | 24  | 30.0        | 45    | 1.0       | FAG18K106K212KL5 |
| 180 | 15              | 42         | 37      | 22      | 37.5    | \        | 14.0          | 675          | 2025          | 3.5                             | 24  | 21.9        | 45    | 1.0       | FAG18K156K274KL5 |
| 180 | 18              | 42         | 44      | 24      | 37.5    | \        | 14.0          | 810          | 2430          | 2.8                             | 24  | 27.3        | 45    | 1.0       | FAG18K186K324KL5 |
| 180 | 20              | 42         | 44      | 24      | 37.5    | \        | 15.0          | 900          | 2700          | 2.5                             | 24  | 26.7        | 45    | 1.0       | FAG18K206K322KL5 |
| 180 | 22              | 42         | 44      | 24      | 37.5    | \        | 15.0          | 990          | 2970          | 2.2                             | 26  | 30.3        | 45    | 1.0       | FAG18K226K322KL5 |
| 180 | 25              | 42         | 45      | 30      | 37.5    | \        | 15.0          | 1125         | 3375          | 2.0                             | 26  | 33.3        | 45    | 1.0       | FAG18K256K422KL5 |
| 180 | 30              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0          | 1350         | 4050          | 1.8                             | 28  | 25.7        | 45    | 1.2       | FAG18K306K472KL5 |
| 180 | 33              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0          | 1485         | 4455          | 1.6                             | 28  | 28.9        | 45    | 1.2       | FAG18K336K472KL5 |
| 180 | 40              | 57.5       | 45      | 30      | 52.5    | 20.3     | 20.0          | 1000         | 3000          | 2.5                             | 30  | 15.0        | 25    | 1.2       | FAG18K406M164MD5 |
| 180 | 50              | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.0          | 1250         | 3750          | 2.2                             | 32  | 11.8        | 25    | 1.2       | FAG18K506M204MD5 |
| 180 | 60              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 26.0          | 1500         | 4500          | 1.8                             | 32  | 12.3        | 25    | 1.2       | FAG18K606M474MD5 |
| 250 | 1.0             | 32         | 18      | 9       | 27.5    | \        | 3.0           | 90           | 270           | 16.5                            | 16  | 101.0       | 90    | 0.8       | FAG25K105G152GL5 |
| 250 | 1.5             | 32         | 20      | 11      | 27.5    | \        | 4.0           | 135          | 405           | 10.5                            | 16  | 89.3        | 90    | 0.8       | FAG25K155G182GL5 |
| 250 | 2.0             | 32         | 22      | 13      | 27.5    | \        | 5.0           | 180          | 540           | 8.5                             | 16  | 70.6        | 90    | 0.8       | FAG25K205G212GL5 |
| 250 | 2.2             | 32         | 22      | 13      | 27.5    | \        | 6.0           | 198          | 594           | 7.8                             | 16  | 53.4        | 90    | 0.8       | FAG25K225G212GL5 |
| 250 | 2.5             | 32         | 22      | 13      | 27.5    | \        | 6.0           | 225          | 675           | 7.5                             | 16  | 55.6        | 90    | 0.8       | FAG25K255G212GL5 |
| 250 | 3.0             | 32         | 24.5    | 15      | 27.5    | \        | 7.0           | 270          | 810           | 6.5                             | 16  | 47.1        | 90    | 0.8       | FAG25K305G272GL5 |
| 250 | 3.3             | 32         | 24.5    | 15      | 27.5    | \        | 8.0           | 297          | 891           | 6.2                             | 16  | 37.8        | 90    | 0.8       | FAG25K335G272GL5 |
| 250 | 3.5             | 32         | 28      | 14      | 27.5    | \        | 8.0           | 315          | 945           | 5.8                             | 18  | 40.4        | 90    | 0.8       | FAG25K355G262GL5 |
| 250 | 4.0             | 32         | 28      | 18      | 27.5    | \        | 10.0          | 360          | 1080          | 4.8                             | 20  | 31.3        | 90    | 0.8       | FAG25K405G332GL5 |
| 250 | 4.5             | 32         | 33      | 18      | 27.5    | \        | 10.0          | 405          | 1215          | 4.5                             | 20  | 33.3        | 90    | 0.8       | FAG25K455G342GL5 |
| 250 | 5.0             | 32         | 33      | 18      | 27.5    | \        | 11.0          | 450          | 1350          | 4.0                             | 20  | 31.0        | 90    | 0.8       | FAG25K505G342GL5 |
| 250 | 6.8             | 32         | 37      | 22      | 27.5    | \        | 14.0          | 612          | 1836          | 2.8                             | 22  | 27.3        | 90    | 1.0       | FAG25K106G402GL5 |
| 250 | 4.7             | 42         | 30      | 16      | 37.5    | \        | 7.0           | 282          | 846           | 7.5                             | 24  | 40.8        | 60    | 1.0       | FAG25K475K142KL5 |
| 250 | 5.0             | 42         | 30      | 16      | 37.5    | \        | 8.0           | 300          | 900           | 7.0                             | 24  | 33.5        | 60    | 1.0       | FAG25K505K142KL5 |
| 250 | 6.0             | 42         | 30      | 16      | 37.5    | \        | 9.0           | 360          | 1080          | 6.0                             | 24  | 30.9        | 60    | 1.0       | FAG25K605K142KL5 |
| 250 | 6.5             | 42         | 30      | 16      | 37.5    | \        | 10.0          | 390          | 1170          | 5.6                             | 24  | 26.8        | 60    | 1.0       | FAG25K655K142KL5 |
| 250 | 6.8             | 42         | 32      | 19      | 37.5    | \        | 10.5          | 408          | 1224          | 5.4                             | 24  | 25.2        | 60    | 1.0       | FAG25K685K212KL5 |
| 250 | 7.5             | 42         | 32      | 19      | 37.5    | \        | 11.0          | 450          | 1350          | 5.0                             | 24  | 24.8        | 60    | 1.0       | FAG25K755K212KL5 |
| 250 | 8.0             | 42         | 37      | 22      | 37.5    | \        | 12.0          | 480          | 1440          | 4.5                             | 24  | 23.1        | 60    | 1.0       | FAG25K805K274KL5 |
| 250 | 10              | 42         | 37      | 22      | 37.5    | \        | 13.0          | 600          | 1800          | 3.6                             | 24  | 24.7        | 60    | 1.0       | FAG25K106K274KL5 |
| 250 | 12              | 42         | 44      | 24      | 37.5    | \        | 14.0          | 720          | 2160          | 3.0                             | 24  | 25.5        | 60    | 1.0       | FAG25K126K324KL5 |
| 250 | 15              | 42         | 44      | 24      | 37.5    | \        | 14.0          | 900          | 2700          | 2.5                             | 24  | 30.6        | 60    | 1.0       | FAG25K156K322KL5 |
| 250 | 18              | 42         | 43      | 28      | 37.5    | \        | 15.0          | 1080         | 3240          | 2.2                             | 26  | 30.3        | 60    | 1.0       | FAG25K186K392KL5 |
| 250 | 20              | 42         | 45      | 30      | 37.5    | \        | 15.0          | 1200         | 3600          | 2.0                             | 26  | 33.3        | 60    | 1.0       | FAG25K206K422KL5 |
| 250 | 22              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0          | 1320         | 3960          | 1.8                             | 28  | 25.7        | 60    | 1.2       | FAG25K226K474KD5 |
| 250 | 25              | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.0          | 750          | 2250          | 3.2                             | 30  | 14.5        | 30    | 1.2       | FAG25K256M164MD5 |
| 250 | 30              | 57.5       | 45      | 30      | 52.5    | 20.3     | 20.0          | 900          | 2700          | 2.8                             | 30  | 13.4        | 30    | 1.2       | FAG25K306M164MD5 |
| 250 | 35              | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.0          | 1050         | 3150          | 2.4                             | 32  | 10.9        | 30    | 1.2       | FAG25K356M204MD5 |
| 250 | 40              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 26.0          | 1200         | 3600          | 2.0                             | 32  | 11.1        | 30    | 1.2       | FAG25K406M474MD5 |
| 300 | 1.0             | 32         | 20      | 11      | 27.5    | \        | 4.0           | 90           | 270           | 12.5                            | 16  | 75.0        | 90    | 0.8       | FAG30K105G182GL5 |
| 300 | 1.5             | 32         | 22      | 13      | 27.5    | \        | 5.0           | 135          | 405           | 8.5                             | 16  | 70.6        | 90    | 0.8       | FAG30K155G212GL5 |
| 300 | 2.0             | 32         | 24.5    | 15      | 27.5    | \        | 6.0           | 180          | 540           | 7.5                             | 16  | 55.6        | 90    | 0.8       | FAG30K205G272GL5 |
| 300 | 2.2             | 32         | 24.5    | 15      | 27.5    | \        | 7.0           | 198          | 594           | 6.8                             | 16  | 45.0        | 90    | 0.8       | FAG30K225G272GL5 |
| 300 | 2.5             | 32         | 28      | 14      | 27.5    | \        | 8.0           | 225          | 675           | 6.5                             | 18  | 36.1        | 90    | 0.8       | FAG30K255G262GL5 |
| 300 | 3.0             | 32         | 28      | 18      | 27.5    | \        | 9.0           | 270          | 810           | 6.0                             | 20  | 30.9        | 90    | 0.8       | FAG30K305G332GL5 |
| 300 | 3.3             | 32         | 33      | 18      | 27.5    | \        | 10.0          | 297          | 891           | 4.8                             | 20  | 31.3        | 90    | 0.8       | FAG30K335G342GL5 |
| 300 | 3.5             | 32         | 33      | 18      | 27.5    | \        | 10.5          | 315          | 945           | 4.6                             | 20  | 29.6        | 90    | 0.8       | FAG30K355G342GL5 |
| 300 | 4.0             | 32         | 33      | 18      | 27.5    | \        | 11.0          | 360          | 1080          | 4.2                             | 20  | 29.5        | 90    | 0.8       | FAG30K405G342GL5 |
| 300 | 4.7             | 32         | 37      | 22      | 27.5    | \        | 13.0          | 423          | 1269          | 3.8                             | 22  | 23.4        | 90    | 1.0       | FAG30K475G402GL5 |
| 300 | 5.0             | 32         | 37      | 22      | 27.5    | \        | 13.5          | 450          | 1350          | 3.6                             | 22  | 22.9        | 90    | 1.0       | FAG30K505G402GL5 |
| 300 | 5.6             | 32         | 37      | 22      | 27.5    | \        | 14.0          | 504          | 1512          | 3.0                             | 22  | 25.5        | 90    | 1.0       | FAG30K565G402GL5 |

# Metalized Polypropylene Film AC Filtering Capacitors

## FAG Series - 180VAC ~ 760VAC, THB Grade IIIB



### Rating and Part Number

| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 300 | 3.0             | 42         | 30      | 16      | 37.5    | \        | 6.0           | 180          | 540           | 9.0                             | 24  | 46.3        | 60    | 1.0       | FAG30K305K142KL5 |
| 300 | 3.3             | 42         | 30      | 16      | 37.5    | \        | 7.0           | 198          | 594           | 8.5                             | 24  | 36.0        | 60    | 1.0       | FAG30K335K142KL5 |
| 300 | 3.5             | 42         | 30      | 16      | 37.5    | \        | 7.0           | 210          | 630           | 8.0                             | 24  | 38.3        | 60    | 1.0       | FAG30K355K142KL5 |
| 300 | 4.0             | 42         | 30      | 16      | 37.5    | \        | 8.0           | 240          | 720           | 6.8                             | 24  | 34.5        | 60    | 1.0       | FAG30K405K142KL5 |
| 300 | 4.5             | 42         | 30      | 16      | 37.5    | \        | 9.0           | 270          | 810           | 6.0                             | 24  | 30.9        | 60    | 1.0       | FAG30K455K142KL5 |
| 300 | 4.7             | 42         | 30      | 16      | 37.5    | \        | 9.0           | 282          | 846           | 5.8                             | 24  | 31.9        | 60    | 1.0       | FAG30K475K142KL5 |
| 300 | 5.0             | 42         | 32      | 19      | 37.5    | \        | 10.0          | 300          | 900           | 5.5                             | 24  | 27.3        | 60    | 1.0       | FAG30K505K212KL5 |
| 300 | 6.0             | 42         | 32      | 19      | 37.5    | \        | 11.0          | 360          | 1080          | 5.0                             | 24  | 24.8        | 60    | 1.0       | FAG30K605K212KL5 |
| 300 | 6.8             | 42         | 37      | 22      | 37.5    | \        | 12.0          | 408          | 1224          | 4.5                             | 24  | 23.1        | 60    | 1.0       | FAG30K685K274KL5 |
| 300 | 8.0             | 42         | 37      | 22      | 37.5    | \        | 13.0          | 480          | 1440          | 3.6                             | 24  | 24.7        | 60    | 1.0       | FAG30K805K274KL5 |
| 300 | 10              | 42         | 44      | 24      | 37.5    | \        | 14.0          | 600          | 1800          | 3.0                             | 24  | 25.5        | 60    | 1.0       | FAG30K106K324KL5 |
| 300 | 12              | 42         | 43      | 28      | 37.5    | \        | 15.0          | 720          | 2160          | 2.4                             | 26  | 27.8        | 60    | 1.0       | FAG30K126K392KL5 |
| 300 | 15              | 42         | 45      | 30      | 37.5    | \        | 15.0          | 900          | 2700          | 2.2                             | 26  | 30.3        | 60    | 1.0       | FAG30K156K422KL5 |
| 300 | 18              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0          | 1080         | 3240          | 2.0                             | 28  | 23.1        | 60    | 1.2       | FAG30K186K474KD5 |
| 300 | 18              | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.0          | 540          | 1620          | 3.5                             | 30  | 16.7        | 30    | 1.2       | FAG30K186M164MD5 |
| 300 | 20              | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.0          | 600          | 1800          | 3.2                             | 30  | 14.5        | 30    | 1.2       | FAG30K206M164MD5 |
| 300 | 25              | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0          | 750          | 2250          | 3.0                             | 32  | 12.5        | 30    | 1.2       | FAG30K256M204MD5 |
| 300 | 30              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 24.0          | 900          | 2700          | 2.4                             | 32  | 10.9        | 30    | 1.2       | FAG30K306M474MD5 |
| 350 | 0.33            | 32         | 18      | 9       | 27.5    | \        | 1.5           | 33           | 99            | 45.0                            | 16  | 148.1       | 100   | 0.8       | FAG35K334G152GL5 |
| 350 | 0.39            | 32         | 18      | 9       | 27.5    | \        | 1.6           | 39           | 117           | 40.0                            | 16  | 146.5       | 100   | 0.8       | FAG35K394G152GL5 |
| 350 | 0.47            | 32         | 18      | 9       | 27.5    | \        | 2.0           | 47           | 141           | 35.0                            | 16  | 107.1       | 100   | 0.8       | FAG35K474G152GL5 |
| 350 | 0.68            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 68           | 204           | 24.0                            | 16  | 100.0       | 100   | 0.8       | FAG35K684G182GL5 |
| 350 | 0.82            | 32         | 22      | 13      | 27.5    | \        | 3.0           | 82           | 246           | 20.5                            | 16  | 81.3        | 100   | 0.8       | FAG35K824G212GL5 |
| 350 | 1.0             | 32         | 22      | 13      | 27.5    | \        | 3.2           | 100          | 300           | 15.5                            | 16  | 94.5        | 100   | 0.8       | FAG35K105G212GL5 |
| 350 | 1.5             | 32         | 24.5    | 15      | 27.5    | \        | 4.0           | 150          | 450           | 13.0                            | 16  | 72.1        | 100   | 0.8       | FAG35K155G272GL5 |
| 350 | 2.0             | 32         | 28      | 18      | 27.5    | \        | 4.8           | 200          | 600           | 10.8                            | 18  | 60.3        | 100   | 0.8       | FAG35K205G332GL5 |
| 350 | 2.2             | 32         | 28      | 18      | 27.5    | \        | 5.0           | 220          | 660           | 10.2                            | 18  | 58.8        | 100   | 0.8       | FAG35K225G332GL5 |
| 350 | 2.5             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 250          | 750           | 7.0                             | 20  | 59.5        | 100   | 0.8       | FAG35K255G342GL5 |
| 350 | 3.0             | 32         | 37      | 22      | 27.5    | \        | 7.0           | 300          | 900           | 5.8                             | 22  | 52.8        | 100   | 1.0       | FAG35K305G402GL5 |
| 350 | 3.3             | 32         | 37      | 22      | 27.5    | \        | 7.5           | 330          | 990           | 5.2                             | 22  | 51.3        | 100   | 1.0       | FAG35K335G402GL5 |
| 350 | 3.5             | 32         | 37      | 22      | 27.5    | \        | 7.8           | 350          | 1050          | 5.0                             | 22  | 49.3        | 100   | 1.0       | FAG35K355G402GL5 |
| 350 | 4.0             | 32         | 37      | 22      | 27.5    | \        | 8.0           | 400          | 1200          | 4.5                             | 22  | 52.1        | 100   | 1.0       | FAG35K405G402GL5 |
| 350 | 2.0             | 42         | 30      | 16      | 37.5    | \        | 4.5           | 140          | 420           | 12.8                            | 24  | 57.9        | 70    | 1.0       | FAG35K205K142KL5 |
| 350 | 2.2             | 42         | 30      | 16      | 37.5    | \        | 4.8           | 154          | 462           | 12.5                            | 24  | 52.1        | 70    | 1.0       | FAG35K225K142KL5 |
| 350 | 2.5             | 42         | 30      | 16      | 37.5    | \        | 5.2           | 175          | 525           | 11.8                            | 24  | 47.0        | 70    | 1.0       | FAG35K255K142KL5 |
| 350 | 3.0             | 42         | 30      | 16      | 37.5    | \        | 5.5           | 210          | 630           | 10.8                            | 24  | 45.9        | 70    | 1.0       | FAG35K305K142KL5 |
| 350 | 3.3             | 42         | 30      | 16      | 37.5    | \        | 6.0           | 231          | 693           | 8.8                             | 24  | 47.3        | 70    | 1.0       | FAG35K335K142KL5 |
| 350 | 3.5             | 42         | 30      | 16      | 37.5    | \        | 6.5           | 245          | 735           | 8.6                             | 24  | 41.3        | 70    | 1.0       | FAG35K355K142KL5 |
| 350 | 4.0             | 42         | 32      | 19      | 37.5    | \        | 7.0           | 280          | 840           | 8.0                             | 24  | 38.3        | 70    | 1.0       | FAG35K405K212KL5 |
| 350 | 4.5             | 42         | 37      | 22      | 37.5    | \        | 8.0           | 315          | 945           | 7.0                             | 24  | 33.5        | 70    | 1.0       | FAG35K455K274KL5 |
| 350 | 5.0             | 42         | 37      | 22      | 37.5    | \        | 8.5           | 350          | 1050          | 6.8                             | 24  | 30.5        | 70    | 1.0       | FAG35K505K274KL5 |
| 350 | 5.5             | 42         | 37      | 22      | 37.5    | \        | 8.8           | 385          | 1155          | 6.4                             | 24  | 30.3        | 70    | 1.0       | FAG35K555K274KL5 |
| 350 | 6.0             | 42         | 44      | 24      | 37.5    | \        | 9.5           | 420          | 1260          | 6.0                             | 24  | 27.7        | 70    | 1.0       | FAG35K605K324KL5 |
| 350 | 6.5             | 42         | 44      | 24      | 37.5    | \        | 10.0          | 455          | 1365          | 5.5                             | 24  | 27.3        | 70    | 1.0       | FAG35K655K324KL5 |
| 350 | 7.0             | 42         | 44      | 24      | 37.5    | \        | 10.5          | 490          | 1470          | 5.2                             | 24  | 26.2        | 70    | 1.0       | FAG35K705K324KL5 |
| 350 | 8.0             | 42         | 44      | 24      | 37.5    | \        | 10.5          | 560          | 1680          | 5.2                             | 24  | 26.2        | 70    | 1.0       | FAG35K805K324KL5 |
| 350 | 8.5             | 42         | 43      | 28      | 37.5    | \        | 11.0          | 595          | 1785          | 4.8                             | 26  | 25.8        | 70    | 1.0       | FAG35K855K392KL5 |
| 350 | 9.0             | 42         | 43      | 28      | 37.5    | \        | 11.0          | 630          | 1890          | 4.6                             | 26  | 26.9        | 70    | 1.0       | FAG35K905K392KL5 |
| 350 | 9.5             | 42         | 45      | 30      | 37.5    | \        | 11.5          | 665          | 1995          | 4.4                             | 26  | 25.8        | 70    | 1.0       | FAG35K955K422KL5 |
| 350 | 10              | 42         | 45      | 30      | 37.5    | \        | 12.0          | 700          | 2100          | 4.2                             | 26  | 24.8        | 70    | 1.0       | FAG35K106K422KL5 |
| 350 | 12              | 42         | 50      | 35      | 37.5    | 20.3     | 14.0          | 840          | 2520          | 3.6                             | 28  | 21.3        | 70    | 1.2       | FAG35K126K474KD5 |
| 350 | 15              | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.5          | 600          | 1800          | 3.5                             | 30  | 15.7        | 40    | 1.2       | FAG35K156M164MD5 |
| 350 | 18              | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.0          | 720          | 2160          | 3.0                             | 32  | 15.4        | 40    | 1.2       | FAG35K186M204MD5 |
| 350 | 20              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 20.0          | 800          | 2400          | 2.8                             | 32  | 13.4        | 40    | 1.2       | FAG35K206M474MD5 |
| 350 | 22              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 22.0          | 880          | 2640          | 2.6                             | 32  | 11.9        | 40    | 1.2       | FAG35K226M474MD5 |
| 350 | 25              | 57.5       | 55      | 45      | 52.5    | 20.3     | 24.0          | 1000         | 3000          | 2.4                             | 32  | 10.9        | 40    | 1.2       | FAG35K256M324MD5 |

# Metalized Polypropylene Film AC Filtering Capacitors

## FAG Series - 180VAC ~ 760VAC, THB Grade IIIB



### Rating and Part Number

| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 350 | 30              | 57.5       | 65      | 45      | 52.5    | 20.3     | 26.0          | 1200         | 3600          | 2.2                             | 32  | 10.1        | 40    | 1.2       | FAG35K306M344MD5 |
| 400 | 0.33            | 32         | 18      | 9       | 27.5    | \        | 1.5           | 40           | 119           | 45.0                            | 16  | 148.1       | 120   | 0.8       | FAG40K334G152GL5 |
| 400 | 0.39            | 32         | 18      | 9       | 27.5    | \        | 1.6           | 47           | 140           | 40.0                            | 16  | 146.5       | 120   | 0.8       | FAG40K394G152GL5 |
| 400 | 0.47            | 32         | 18      | 9       | 27.5    | \        | 2.0           | 56           | 169           | 35.0                            | 16  | 107.1       | 120   | 0.8       | FAG40K474G152GL5 |
| 400 | 0.68            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 82           | 245           | 24.0                            | 16  | 100.0       | 120   | 0.8       | FAG40K684G182GL5 |
| 400 | 0.82            | 32         | 22      | 13      | 27.5    | \        | 3.0           | 98           | 295           | 20.5                            | 16  | 81.3        | 120   | 0.8       | FAG40K824G212GL5 |
| 400 | 1.0             | 32         | 24      | 14      | 27.5    | \        | 3.2           | 120          | 360           | 15.5                            | 16  | 94.5        | 120   | 0.8       | FAG40K105G252GL5 |
| 400 | 1.5             | 32         | 28      | 18      | 27.5    | \        | 4.8           | 180          | 540           | 10.8                            | 18  | 60.3        | 120   | 0.8       | FAG40K155G332GL5 |
| 400 | 2.0             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 240          | 720           | 7.0                             | 20  | 59.5        | 120   | 0.8       | FAG40K205G342GL5 |
| 400 | 2.2             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 264          | 792           | 7.0                             | 20  | 59.5        | 120   | 0.8       | FAG40K225G342GL5 |
| 400 | 2.5             | 32         | 37      | 22      | 27.5    | \        | 7.0           | 300          | 900           | 5.8                             | 22  | 52.8        | 120   | 1.0       | FAG40K255G402GL5 |
| 400 | 3.0             | 32         | 37      | 22      | 27.5    | \        | 7.5           | 360          | 1080          | 5.2                             | 22  | 51.3        | 120   | 1.0       | FAG40K305G402GL5 |
| 400 | 2.0             | 42         | 30      | 16      | 37.5    | \        | 4.5           | 160          | 480           | 12.8                            | 24  | 57.9        | 80    | 1.0       | FAG40K205K142KL5 |
| 400 | 2.2             | 42         | 30      | 16      | 37.5    | \        | 4.8           | 176          | 528           | 12.5                            | 24  | 52.1        | 80    | 1.0       | FAG40K225K142KL5 |
| 400 | 2.5             | 42         | 30      | 16      | 37.5    | \        | 5.2           | 200          | 600           | 11.8                            | 24  | 47.0        | 80    | 1.0       | FAG40K255K142KL5 |
| 400 | 3.0             | 42         | 32      | 19      | 37.5    | \        | 6.0           | 240          | 720           | 8.8                             | 24  | 47.3        | 80    | 1.0       | FAG40K305K212KL5 |
| 400 | 3.3             | 42         | 32      | 19      | 37.5    | \        | 6.5           | 264          | 792           | 8.6                             | 24  | 41.3        | 80    | 1.0       | FAG40K335K212KL5 |
| 400 | 3.5             | 42         | 37      | 22      | 37.5    | \        | 7.0           | 280          | 840           | 8.0                             | 24  | 38.3        | 80    | 1.0       | FAG40K355K274KL5 |
| 400 | 4.0             | 42         | 37      | 22      | 37.5    | \        | 8.0           | 320          | 960           | 7.0                             | 24  | 33.5        | 80    | 1.0       | FAG40K405K274KL5 |
| 400 | 4.5             | 42         | 37      | 22      | 37.5    | \        | 8.5           | 360          | 1080          | 6.8                             | 24  | 30.5        | 80    | 1.0       | FAG40K455K274KL5 |
| 400 | 5.0             | 42         | 44      | 24      | 37.5    | \        | 9.5           | 400          | 1200          | 6.0                             | 24  | 27.7        | 80    | 1.0       | FAG40K505K324KL5 |
| 400 | 5.5             | 42         | 44      | 24      | 37.5    | \        | 10.0          | 440          | 1320          | 5.5                             | 24  | 27.3        | 80    | 1.0       | FAG40K555K324KL5 |
| 400 | 6.0             | 42         | 43      | 28      | 37.5    | \        | 10.5          | 480          | 1440          | 4.8                             | 26  | 28.3        | 80    | 1.0       | FAG40K605K392KL5 |
| 400 | 6.5             | 42         | 43      | 28      | 37.5    | \        | 10.5          | 520          | 1560          | 4.6                             | 26  | 29.6        | 80    | 1.0       | FAG40K655K392KL5 |
| 400 | 7.0             | 42         | 43      | 28      | 37.5    | \        | 11.0          | 560          | 1680          | 4.4                             | 26  | 28.2        | 80    | 1.0       | FAG40K705K392KL5 |
| 400 | 7.5             | 42         | 45      | 30      | 37.5    | \        | 11.0          | 600          | 1800          | 4.4                             | 26  | 28.2        | 80    | 1.0       | FAG40K755K422KL5 |
| 400 | 8.0             | 42         | 45      | 30      | 37.5    | \        | 11.5          | 640          | 1920          | 4.2                             | 26  | 27.0        | 80    | 1.0       | FAG40K805K422KL5 |
| 400 | 9.0             | 42         | 50      | 35      | 37.5    | 20.3     | 12.5          | 720          | 2160          | 4.0                             | 28  | 24.0        | 80    | 1.2       | FAG40K905K474KD5 |
| 400 | 10              | 42         | 50      | 35      | 37.5    | 20.3     | 14.0          | 800          | 2400          | 3.6                             | 28  | 21.3        | 80    | 1.2       | FAG40K106K474KD5 |
| 400 | 10              | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5          | 500          | 1500          | 4.2                             | 30  | 22.9        | 50    | 1.2       | FAG40K106M164MD5 |
| 400 | 12              | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.0          | 600          | 1800          | 3.8                             | 32  | 20.1        | 50    | 1.2       | FAG40K126M204MD5 |
| 400 | 14              | 57.5       | 50      | 35      | 52.5    | 20.3     | 16.0          | 700          | 2100          | 3.6                             | 32  | 16.3        | 50    | 1.2       | FAG40K146M204MD5 |
| 400 | 18              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 20.0          | 900          | 2700          | 3.0                             | 32  | 12.5        | 50    | 1.2       | FAG40K186M474MD5 |
| 400 | 20              | 57.5       | 55      | 45      | 52.5    | 20.3     | 22.0          | 1000         | 3000          | 2.8                             | 32  | 11.1        | 50    | 1.2       | FAG40K206M324MD5 |
| 400 | 22              | 57.5       | 65      | 45      | 52.5    | 20.3     | 24.0          | 1100         | 3300          | 2.5                             | 32  | 10.4        | 50    | 1.2       | FAG40K226M344MD5 |
| 400 | 25              | 57.5       | 65      | 45      | 52.5    | 20.3     | 26.0          | 1250         | 3750          | 2.2                             | 32  | 10.1        | 50    | 1.2       | FAG40K256M344MD5 |
| 500 | 0.22            | 32         | 18      | 9       | 27.5    | \        | 1.5           | 31           | 92            | 45.0                            | 16  | 148.1       | 140   | 0.8       | FAG50K224G152GL5 |
| 500 | 0.27            | 32         | 18      | 9       | 27.5    | \        | 1.6           | 38           | 113           | 40.0                            | 16  | 146.5       | 140   | 0.8       | FAG50K274G152GL5 |
| 500 | 0.33            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 46           | 139           | 24.0                            | 16  | 100.0       | 140   | 0.8       | FAG50K334G182GL5 |
| 500 | 0.39            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 55           | 164           | 24.0                            | 16  | 100.0       | 140   | 0.8       | FAG50K394G182GL5 |
| 500 | 0.47            | 32         | 22      | 13      | 27.5    | \        | 2.8           | 66           | 197           | 21.5                            | 16  | 89.0        | 140   | 0.8       | FAG50K474G212GL5 |
| 500 | 0.56            | 32         | 22      | 13      | 27.5    | \        | 3.0           | 78           | 235           | 20.5                            | 16  | 81.3        | 140   | 0.8       | FAG50K564G212GL5 |
| 500 | 0.68            | 32         | 24.5    | 15      | 27.5    | \        | 3.5           | 95           | 286           | 15.5                            | 16  | 79.0        | 140   | 0.8       | FAG50K684G272GL5 |
| 500 | 0.82            | 32         | 28      | 18      | 27.5    | \        | 4.8           | 115          | 344           | 12.5                            | 18  | 52.1        | 140   | 0.8       | FAG50K824G332GL5 |
| 500 | 1.0             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 140          | 420           | 9.0                             | 20  | 46.3        | 140   | 0.8       | FAG50K105G342GL5 |
| 500 | 1.2             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 168          | 504           | 9.0                             | 20  | 46.3        | 140   | 0.8       | FAG50K125G342GL5 |
| 500 | 1.5             | 32         | 37      | 22      | 27.5    | \        | 7.0           | 210          | 630           | 8.5                             | 22  | 36.0        | 140   | 1.0       | FAG50K155G402GL5 |
| 500 | 1.8             | 32         | 37      | 22      | 27.5    | \        | 7.5           | 252          | 756           | 7.8                             | 22  | 34.2        | 140   | 1.0       | FAG50K185G402GL5 |
| 500 | 1.0             | 42         | 30      | 16      | 37.5    | \        | 4.5           | 90           | 270           | 12.8                            | 24  | 57.9        | 90    | 1.0       | FAG50K105K142KL5 |
| 500 | 1.2             | 42         | 30      | 16      | 37.5    | \        | 4.8           | 108          | 324           | 12.5                            | 24  | 52.1        | 90    | 1.0       | FAG50K125K142KL5 |
| 500 | 1.5             | 42         | 30      | 16      | 37.5    | \        | 5.2           | 135          | 405           | 11.8                            | 24  | 47.0        | 90    | 1.0       | FAG50K155K142KL5 |
| 500 | 1.8             | 42         | 32      | 19      | 37.5    | \        | 6.0           | 162          | 486           | 9.0                             | 24  | 46.3        | 90    | 1.0       | FAG50K185K212KL5 |
| 500 | 2.0             | 42         | 32      | 19      | 37.5    | \        | 6.5           | 180          | 540           | 8.6                             | 24  | 41.3        | 90    | 1.0       | FAG50K205K212KL5 |
| 500 | 2.5             | 42         | 37      | 22      | 37.5    | \        | 7.0           | 225          | 675           | 8.0                             | 24  | 38.3        | 90    | 1.0       | FAG50K255K274KL5 |
| 500 | 2.8             | 42         | 37      | 22      | 37.5    | \        | 8.0           | 252          | 756           | 7.0                             | 24  | 33.5        | 90    | 1.0       | FAG50K285K274KL5 |
| 500 | 3.0             | 42         | 37      | 22      | 37.5    | \        | 8.5           | 270          | 810           | 6.8                             | 24  | 30.5        | 90    | 1.0       | FAG50K305K274KL5 |

# Metalized Polypropylene Film AC Filtering Capacitors

## FAG Series - 180VAC ~ 760VAC, THB Grade IIIB



### Rating and Part Number

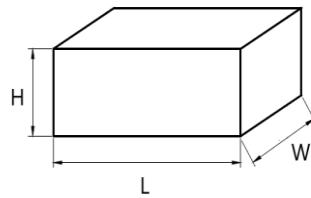
| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
|     |                 | A 70°C     | A       | mΩ      | nH      | °C/W     | V/us          | mm           |               |                                 |     |             |       |           |                  |
| 500 | 3.5             | 42         | 44      | 24      | 37.5    | \        | 9.5           | 315          | 945           | 6.0                             | 24  | 27.7        | 90    | 1.0       | FAG50K355K324KL5 |
| 500 | 4.0             | 42         | 43      | 28      | 37.5    | \        | 10.5          | 360          | 1080          | 4.8                             | 26  | 28.3        | 90    | 1.0       | FAG50K405K392KL5 |
| 500 | 4.5             | 42         | 43      | 28      | 37.5    | \        | 10.5          | 405          | 1215          | 4.8                             | 26  | 28.3        | 90    | 1.0       | FAG50K455K392KL5 |
| 500 | 5.0             | 42         | 45      | 30      | 37.5    | \        | 11.0          | 450          | 1350          | 4.5                             | 26  | 27.5        | 90    | 1.0       | FAG50K505K422KL5 |
| 500 | 5.5             | 42         | 50      | 35      | 37.5    | 20.3     | 12.5          | 495          | 1485          | 4.2                             | 28  | 22.9        | 90    | 1.2       | FAG50K555K474KD5 |
| 500 | 6.0             | 42         | 50      | 35      | 37.5    | 20.3     | 14.0          | 540          | 1620          | 3.8                             | 28  | 20.1        | 90    | 1.2       | FAG50K605K474KD5 |
| 500 | 7.0             | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5          | 420          | 1260          | 4.2                             | 30  | 22.9        | 60    | 1.2       | FAG50K705M164MD5 |
| 500 | 8.0             | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.0          | 480          | 1440          | 3.8                             | 32  | 20.1        | 60    | 1.2       | FAG50K805M204MD5 |
| 500 | 9.0             | 57.5       | 50      | 35      | 52.5    | 20.3     | 16.0          | 540          | 1620          | 3.6                             | 32  | 16.3        | 60    | 1.2       | FAG50K905M204MD5 |
| 500 | 10              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 18.0          | 600          | 1800          | 3.4                             | 32  | 13.6        | 60    | 1.2       | FAG50K106M474MD5 |
| 500 | 12              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 20.0          | 720          | 2160          | 3.2                             | 32  | 11.7        | 60    | 1.2       | FAG50K126M474MD5 |
| 500 | 15              | 57.5       | 65      | 45      | 52.5    | 20.3     | 22.0          | 900          | 2700          | 3.0                             | 32  | 10.3        | 60    | 1.2       | FAG50K156M344MD5 |
| 600 | 0.15            | 32         | 18      | 9       | 27.5    | \        | 1.5           | 24           | 72            | 45.0                            | 16  | 148.1       | 160   | 0.8       | FAG60K154G152GL5 |
| 600 | 0.22            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 35           | 106           | 24.0                            | 16  | 100.0       | 160   | 0.8       | FAG60K224G182GL5 |
| 600 | 0.33            | 32         | 22      | 13      | 27.5    | \        | 2.8           | 53           | 158           | 21.5                            | 16  | 89.0        | 160   | 0.8       | FAG60K334G212GL5 |
| 600 | 0.47            | 32         | 24.5    | 15      | 27.5    | \        | 3.2           | 75           | 226           | 15.5                            | 16  | 94.5        | 160   | 0.8       | FAG60K474G272GL5 |
| 600 | 0.56            | 32         | 28      | 14      | 27.5    | \        | 4.0           | 90           | 269           | 12.5                            | 18  | 75.0        | 160   | 0.8       | FAG60K564G262GL5 |
| 600 | 0.68            | 32         | 28      | 18      | 27.5    | \        | 4.8           | 109          | 326           | 10.8                            | 18  | 60.3        | 160   | 0.8       | FAG60K684G332GL5 |
| 600 | 0.82            | 32         | 33      | 18      | 27.5    | \        | 6.0           | 131          | 394           | 7.0                             | 20  | 59.5        | 160   | 0.8       | FAG60K824G342GL5 |
| 600 | 1.0             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 160          | 480           | 7.0                             | 20  | 59.5        | 160   | 0.8       | FAG60K105G342GL5 |
| 600 | 1.2             | 32         | 37      | 22      | 27.5    | \        | 7.0           | 192          | 576           | 5.8                             | 22  | 52.8        | 160   | 1.0       | FAG60K125G402GL5 |
| 600 | 1.0             | 42         | 30      | 16      | 37.5    | \        | 4.5           | 100          | 300           | 12.8                            | 24  | 57.9        | 100   | 1.0       | FAG60K105K142KL5 |
| 600 | 1.2             | 42         | 32      | 19      | 37.5    | \        | 6.0           | 120          | 360           | 8.8                             | 24  | 47.3        | 100   | 1.0       | FAG60K125K212KL5 |
| 600 | 1.5             | 42         | 32      | 19      | 37.5    | \        | 6.5           | 150          | 450           | 8.6                             | 24  | 41.3        | 100   | 1.0       | FAG60K155K212KL5 |
| 600 | 1.8             | 42         | 37      | 22      | 37.5    | \        | 7.0           | 180          | 540           | 8.0                             | 24  | 38.3        | 100   | 1.0       | FAG60K185K274KL5 |
| 600 | 2.0             | 42         | 37      | 22      | 37.5    | \        | 8.0           | 200          | 600           | 7.0                             | 24  | 33.5        | 100   | 1.0       | FAG60K205K274KL5 |
| 600 | 2.2             | 42         | 44      | 24      | 37.5    | \        | 9.0           | 220          | 660           | 6.5                             | 24  | 28.5        | 100   | 1.0       | FAG60K225K324KL5 |
| 600 | 2.5             | 42         | 44      | 24      | 37.5    | \        | 9.5           | 250          | 750           | 6.0                             | 24  | 27.7        | 100   | 1.0       | FAG60K255K324KL5 |
| 600 | 2.8             | 42         | 43      | 28      | 37.5    | \        | 10.0          | 280          | 840           | 5.5                             | 26  | 27.3        | 100   | 1.0       | FAG60K285K392KL5 |
| 600 | 3.0             | 42         | 45      | 30      | 37.5    | \        | 10.5          | 300          | 900           | 5.0                             | 26  | 27.2        | 100   | 1.0       | FAG60K305K422KL5 |
| 600 | 3.5             | 42         | 50      | 35      | 37.5    | 20.3     | 12.5          | 350          | 1050          | 4.5                             | 28  | 21.3        | 100   | 1.2       | FAG60K335K474KD5 |
| 600 | 4.0             | 42         | 50      | 35      | 37.5    | 20.3     | 14.0          | 400          | 1200          | 4.0                             | 28  | 19.1        | 100   | 1.2       | FAG60K405K474KD5 |
| 600 | 4.5             | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5          | 315          | 945           | 4.5                             | 30  | 21.3        | 70    | 1.2       | FAG60K455M164MD5 |
| 600 | 5.0             | 57.5       | 45      | 30      | 52.5    | 20.3     | 13.5          | 350          | 1050          | 4.2                             | 30  | 19.6        | 70    | 1.2       | FAG60K505M164MD5 |
| 600 | 6.0             | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.0          | 420          | 1260          | 4.0                             | 32  | 19.1        | 70    | 1.2       | FAG60K605M204MD5 |
| 600 | 6.5             | 57.5       | 50      | 35      | 52.5    | 20.3     | 16.0          | 455          | 1365          | 3.8                             | 32  | 15.4        | 70    | 1.2       | FAG60K655M204MD5 |
| 600 | 7.0             | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 18.0          | 490          | 1470          | 3.6                             | 32  | 12.9        | 70    | 1.2       | FAG60K705M474MD5 |
| 600 | 7.5             | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 19.0          | 525          | 1575          | 3.4                             | 32  | 12.2        | 70    | 1.2       | FAG60K755M474MD5 |
| 600 | 8.0             | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 20.0          | 560          | 1680          | 3.2                             | 32  | 11.7        | 70    | 1.2       | FAG60K805M474MD5 |
| 600 | 10              | 57.5       | 65      | 45      | 52.5    | 20.3     | 22.0          | 700          | 2100          | 3.0                             | 32  | 10.3        | 70    | 1.2       | FAG60K106M344MD5 |
| 760 | 0.1             | 32         | 18      | 9       | 27.5    | \        | 1.5           | 20           | 60            | 45.0                            | 16  | 148.1       | 200   | 0.8       | FAG76K104G152GL5 |
| 760 | 0.15            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 30           | 90            | 24.0                            | 16  | 100.0       | 200   | 0.8       | FAG76K154G182GL5 |
| 760 | 0.22            | 32         | 22      | 13      | 27.5    | \        | 2.8           | 44           | 132           | 21.5                            | 16  | 89.0        | 200   | 0.8       | FAG76K224G212GL5 |
| 760 | 0.33            | 32         | 24.5    | 15      | 27.5    | \        | 3.2           | 66           | 198           | 15.5                            | 16  | 94.5        | 200   | 0.8       | FAG76K334G272GL5 |
| 760 | 0.47            | 32         | 28      | 18      | 27.5    | \        | 4.5           | 94           | 282           | 12.0                            | 18  | 61.7        | 200   | 0.8       | FAG76K474G332GL5 |
| 760 | 0.56            | 32         | 33      | 18      | 27.5    | \        | 5.0           | 112          | 336           | 10.5                            | 20  | 57.1        | 200   | 0.8       | FAG76K564G342GL5 |
| 760 | 0.68            | 32         | 37      | 22      | 27.5    | \        | 6.0           | 136          | 408           | 9.5                             | 22  | 43.9        | 200   | 1.0       | FAG76K684G402GL5 |
| 760 | 0.68            | 42         | 30      | 16      | 37.5    | \        | 4.5           | 82           | 245           | 12.8                            | 24  | 57.9        | 120   | 1.0       | FAG76K684K142KL5 |
| 760 | 0.82            | 42         | 32      | 19      | 37.5    | \        | 5.5           | 98           | 295           | 10.0                            | 24  | 49.6        | 120   | 1.0       | FAG76K824K212KL5 |
| 760 | 1.0             | 42         | 32      | 19      | 37.5    | \        | 6.5           | 120          | 360           | 9.0                             | 24  | 39.4        | 120   | 1.0       | FAG76K105K212KL5 |
| 760 | 1.2             | 42         | 37      | 22      | 37.5    | \        | 7.0           | 144          | 432           | 8.5                             | 24  | 36.0        | 120   | 1.0       | FAG76K125K274KL5 |
| 760 | 1.5             | 42         | 44      | 24      | 37.5    | \        | 8.0           | 180          | 540           | 7.5                             | 24  | 31.3        | 120   | 1.0       | FAG76K155K324KL5 |
| 760 | 1.8             | 42         | 43      | 28      | 37.5    | \        | 9.5           | 216          | 648           | 6.5                             | 26  | 25.6        | 120   | 1.0       | FAG76K185K392KL5 |
| 760 | 2.0             | 42         | 45      | 30      | 37.5    | \        | 10.5          | 240          | 720           | 5.0                             | 26  | 27.2        | 120   | 1.0       | FAG76K205K422KL5 |
| 760 | 2.5             | 42         | 50      | 35      | 37.5    | 20.3     | 12.5          | 300          | 900           | 4.5                             | 28  | 21.3        | 120   | 1.2       | FAG76K255K474KD5 |
| 760 | 3.0             | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5          | 240          | 720           | 4.5                             | 30  | 21.3        | 80    | 1.2       | FAG76K305M164MD5 |

### Rating and Part Number

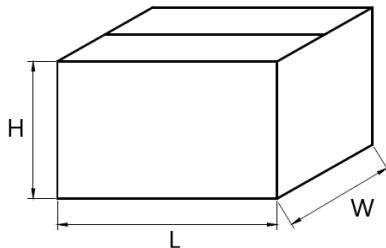
| Vac | Cap Value<br>μF | Dimensions |      |    |      |      | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL  | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|------|----|------|------|---------------|--------------|---------------|---------------------------------|------|-------------|-------|-----------|------------------|
|     |                 | W          | H    | T  | P    | P1   |               |              |               |                                 |      |             |       |           |                  |
|     |                 | mm         | mm   | mm | mm   | mm   | A 70°C        | A            | mΩ            | nH                              | °C/W | V/μs        | mm    | mm        |                  |
| 760 | 4.0             | 57.5       | 50   | 35 | 52.5 | 20.3 | 14.0          | 320          | 960           | 4.0                             | 32   | 19.1        | 80    | 1.2       | FAG76K405M204MD5 |
| 760 | 5.0             | 57.5       | 57.5 | 38 | 52.5 | 20.3 | 16.0          | 400          | 1200          | 3.6                             | 32   | 16.3        | 80    | 1.2       | FAG76K505M474MD5 |
| 760 | 6.0             | 57.5       | 55   | 45 | 52.5 | 20.3 | 18.0          | 480          | 1440          | 3.4                             | 32   | 13.6        | 80    | 1.2       | FAG76K605M324MD5 |
| 760 | 7.0             | 57.5       | 65   | 45 | 52.5 | 20.3 | 20.0          | 560          | 1680          | 3.2                             | 32   | 11.7        | 80    | 1.2       | FAG76K705M344MD5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |    | Packaging Quantity |             |
|-------|-----------|-----------|------|----|--------------------|-------------|
|       |           | W         | H    | T  | Long Leads         | Short Leads |
| 27.5  | G15       | 32        | 18   | 9  | 340                | 340         |
|       | G18       | 32        | 20   | 11 | 280                | 280         |
|       | G21       | 32        | 22   | 13 | 230                | 230         |
|       | G25       | 32        | 24   | 14 | 220                | 220         |
|       | G26       | 32        | 28   | 14 | 220                | 220         |
|       | G27       | 32        | 24.5 | 15 | 200                | 200         |
|       | G33       | 32        | 28   | 18 | 170                | 170         |
|       | G34       | 32        | 33   | 18 | 170                | 170         |
|       | G40       | 32        | 37   | 22 | 140                | 140         |
| 37.5  | K14       | 42        | 30   | 16 | 133                | 133         |
|       | K21       | 42        | 32   | 19 | 112                | 112         |
|       | K27       | 42        | 37   | 22 | 98                 | 98          |
|       | K32       | 42        | 44   | 24 | 91                 | 91          |
|       | K39       | 42        | 43   | 28 | 77                 | 77          |
|       | K42       | 42        | 45   | 30 | 70                 | 70          |
|       | K47       | 42        | 50   | 35 | 63                 | 63          |
| 52.5  | M16       | 57.5      | 45   | 30 | 50                 | 50          |
|       | M20       | 57.5      | 50   | 35 | 45                 | 45          |
|       | M32       | 57.5      | 55   | 45 | 35                 | 35          |
|       | M34       | 57.5      | 65   | 45 | 35                 | 35          |
|       | M47       | 57.5      | 57.5 | 38 | 40                 | 40          |

## Overview

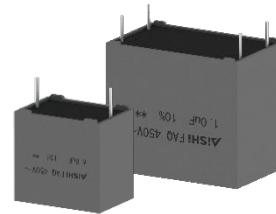
The FAQ capacitor is constructed of metallized polypropylene film encapsulated with epoxy resin in a plastic box, with 2 or 4 tinned copper wire. These FAQ series is suitable for harsh environment conditions and qualify in accordance to AEC-Q200D requirement.

## Applications

Widely used in Clamping, AC and Harmonic Filtering, UPS Systems, Solar Inverter with LCL Filter and Motor Drive and automotive applications.

## Features

- High ripple current
- Self-healing and low loss
- Optimized AC voltage performance
- Suitable for high frequency applications
- Suitable for harsh environment conditions
- THB Grade IIIB (85°C, 85% RH, 1000h at U<sub>RAC</sub>)
- Automotive Grade (AEC-Q200D)



## Qualification

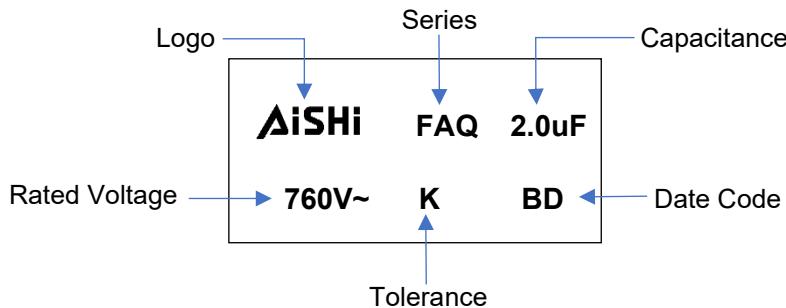
|                    |                                |
|--------------------|--------------------------------|
| Reference Standard | IEC 61071, EN 61071, AEC-Q200D |
| Climate Category   | 55/105/56 IEC 60068-1          |



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 180Vac ~ 760Vac  |
| Capacitance Range           | 0.1uF ~60uF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C   |
| Operating Temperature Range | -55°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.35% per °C for Urms)               |
| Climatic Category           | 55/105/56 IEC 60068-1  |
| Dissipation Factor          | ≤ 0.002 (0.20%) at 1 KHz. C≤20uF at +25°C<br>≤ 0.003 (0.30%) at 1 KHz. C>20uF at +25°C |
| Insulation Resistance       | RC between leads, IR xC≥30,000 s at 100vdc 1minute at +25°C                            |

## Marking



## Part Number System

| F              | AQ   | 76   | K                   | 205   | K42                      | 2KL                          | 5                               |
|----------------|--|--|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series                                     | Voltage (VAC)  | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | AC Filtering, AEC-Q200, Metallized PP Film | 180=18<br>250=25<br>300=30<br>350=35<br>400=40<br>450=45<br>500=50<br>600=60<br>760=76 | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

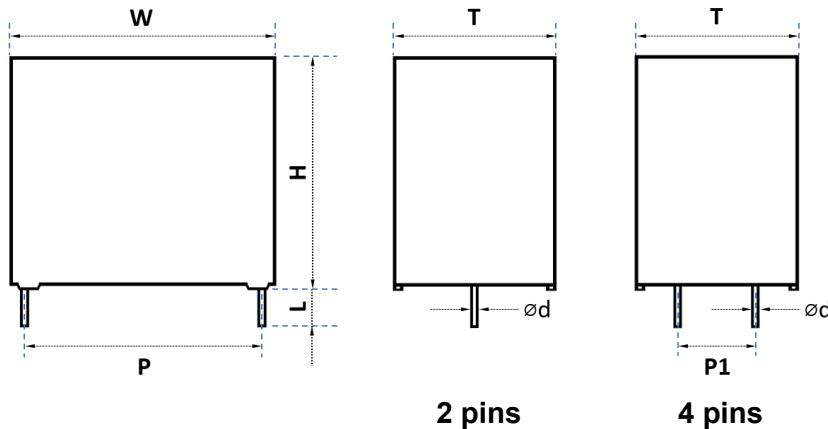
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 27.5mm                    | G | 10.2mm                            | B |
| 2 leads for straight cut          | 2 | 37.5mm                    | K | 12.7mm                            | G |
| 2 leads for forming cut           | E | 52.5mm                    | M | 20.3mm                            | D |
| 4 leads for straight cut          | 4 | N/A                       | N | N/A                               | L |
| 6 leads for straight cut          | 6 |                           |   |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| 20.0mm min  | L |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |    |           | Pitch |           |      |           | $\varnothing d$ |         |           |
|-----------|-----------|-----------|------|-----------|----|-----------|-------|-----------|------|-----------|-----------------|---------|-----------|
|           | W         | Tolerance | H    | Tolerance | T  | Tolerance | P     | Tolerance | P1   | Tolerance | 4 Leads         | 2 Leads | Tolerance |
| G15       | 32        | 0.8       | 18   | 0.8       | 9  | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G25       | 32        | 0.8       | 24   | 0.8       | 14 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G27       | 32        | 0.8       | 24.5 | 0.8       | 15 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G33       | 32        | 0.8       | 28   | 0.8       | 18 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18 | 0.8       | 27.5  | 0.5       | \    | \         | \               | 0.8     | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22 | 0.8       | 27.5  | 0.5       | 10.2 | 0.5       | 1.0             | 1.0     | 0.05      |
| K14       | 42        | 0.8       | 30   | 0.8       | 16 | 0.8       | 37.5  | 0.5       | \    | \         | \               | 1.0     | 0.05      |
| K21       | 42        | 0.8       | 32   | 0.8       | 19 | 0.8       | 37.5  | 0.5       | \    | \         | \               | 1.0     | 0.05      |
| K27       | 42        | 0.8       | 37   | 0.8       | 22 | 0.8       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K32       | 42        | 0.8       | 44   | 0.8       | 24 | 0.8       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K39       | 42        | 0.8       | 43   | 0.8       | 28 | 0.8       | 37.5  | 0.5       | 10.2 | 0.5       | 1.2             | 1.0     | 0.05      |
| K42       | 42        | 0.8       | 45   | 0.8       | 30 | 0.8       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.0     | 0.05      |
| K47       | 42        | 0.8       | 50   | 0.8       | 35 | 0.8       | 37.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.0     | 0.05      |
| M16       | 57.5      | 1.0       | 45   | 1.0       | 30 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M20       | 57.5      | 1.0       | 50   | 1.0       | 35 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M32       | 57.5      | 1.0       | 55   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M34       | 57.5      | 1.0       | 65   | 1.0       | 45 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |
| M47       | 57.5      | 1.0       | 57.5 | 1.0       | 38 | 1.0       | 52.5  | 0.5       | 20.3 | 0.5       | 1.2             | 1.2     | 0.05      |

# Metalized Polypropylene Film AC Filtering Capacitors

## FAQ Series - 180VAC ~ 760VAC (Automotive Grade)



### Rating and Part Number

| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 180 | 4.0             | 32         | 22      | 13      | 27.5    | \        | 7.0           | 300          | 900           | 6.8                             | 16  | 45.0        | 75    | 0.8       | FAQ18K405G212GL5 |
| 180 | 5.0             | 32         | 28      | 18      | 27.5    | \        | 8.0           | 375          | 1125          | 5.5                             | 18  | 42.6        | 75    | 0.8       | FAQ18K505G332GL5 |
| 180 | 6.8             | 32         | 33      | 18      | 27.5    | \        | 11.0          | 510          | 1530          | 4.0                             | 20  | 31.0        | 75    | 0.8       | FAQ18K685G342GL5 |
| 180 | 10              | 32         | 37      | 22      | 27.5    | \        | 13.0          | 750          | 2250          | 2.8                             | 22  | 31.7        | 75    | 1.0       | FAQ18K106G402GL5 |
| 180 | 10              | 42         | 32      | 19      | 37.5    | \        | 10.0          | 450          | 1350          | 5.0                             | 24  | 30.0        | 45    | 1.0       | FAQ18K106K212KL5 |
| 180 | 15              | 42         | 37      | 22      | 37.5    | \        | 14.0          | 675          | 2025          | 3.5                             | 24  | 21.9        | 45    | 1.0       | FAQ18K156K274KL5 |
| 180 | 18              | 42         | 44      | 24      | 37.5    | \        | 14.0          | 810          | 2430          | 2.8                             | 24  | 27.3        | 45    | 1.0       | FAQ18K186K324KL5 |
| 180 | 20              | 42         | 44      | 24      | 37.5    | \        | 15.0          | 900          | 2700          | 2.5                             | 24  | 26.7        | 45    | 1.0       | FAQ18K206K322KL5 |
| 180 | 22              | 42         | 44      | 24      | 37.5    | \        | 15.0          | 990          | 2970          | 2.2                             | 26  | 30.3        | 45    | 1.0       | FAQ18K226K322KL5 |
| 180 | 25              | 42         | 45      | 30      | 37.5    | \        | 15.0          | 1125         | 3375          | 2.0                             | 26  | 33.3        | 45    | 1.0       | FAQ18K256K422KL5 |
| 180 | 30              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0          | 1350         | 4050          | 1.8                             | 28  | 25.7        | 45    | 1.2       | FAQ18K306K472KL5 |
| 180 | 33              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0          | 1485         | 4455          | 1.6                             | 28  | 28.9        | 45    | 1.2       | FAQ18K336K472KL5 |
| 180 | 40              | 57.5       | 45      | 30      | 52.5    | 20.3     | 20.0          | 1000         | 3000          | 2.5                             | 30  | 15.0        | 25    | 1.2       | FAQ18K406M164MD5 |
| 180 | 50              | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.0          | 1250         | 3750          | 2.2                             | 32  | 11.8        | 25    | 1.2       | FAQ18K506M204MD5 |
| 180 | 60              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 26.0          | 1500         | 4500          | 1.8                             | 32  | 12.3        | 25    | 1.2       | FAQ18K606M474MD5 |
| 250 | 1.0             | 32         | 18      | 9       | 27.5    | \        | 3.0           | 90           | 270           | 16.5                            | 16  | 101.0       | 90    | 0.8       | FAQ25K105G152GL5 |
| 250 | 1.5             | 32         | 20      | 11      | 27.5    | \        | 4.0           | 135          | 405           | 10.5                            | 16  | 89.3        | 90    | 0.8       | FAQ25K155G182GL5 |
| 250 | 2.0             | 32         | 22      | 13      | 27.5    | \        | 5.0           | 180          | 540           | 8.5                             | 16  | 70.6        | 90    | 0.8       | FAQ25K205G212GL5 |
| 250 | 2.2             | 32         | 22      | 13      | 27.5    | \        | 6.0           | 198          | 594           | 7.8                             | 16  | 53.4        | 90    | 0.8       | FAQ25K225G212GL5 |
| 250 | 2.5             | 32         | 22      | 13      | 27.5    | \        | 6.0           | 225          | 675           | 7.5                             | 16  | 55.6        | 90    | 0.8       | FAQ25K255G212GL5 |
| 250 | 3.0             | 32         | 24.5    | 15      | 27.5    | \        | 7.0           | 270          | 810           | 6.5                             | 16  | 47.1        | 90    | 0.8       | FAQ25K305G272GL5 |
| 250 | 3.3             | 32         | 24.5    | 15      | 27.5    | \        | 8.0           | 297          | 891           | 6.2                             | 16  | 37.8        | 90    | 0.8       | FAQ25K335G272GL5 |
| 250 | 3.5             | 32         | 28      | 14      | 27.5    | \        | 8.0           | 315          | 945           | 5.8                             | 18  | 40.4        | 90    | 0.8       | FAQ25K355G262GL5 |
| 250 | 4.0             | 32         | 28      | 18      | 27.5    | \        | 10.0          | 360          | 1080          | 4.8                             | 20  | 31.3        | 90    | 0.8       | FAQ25K405G332GL5 |
| 250 | 4.5             | 32         | 33      | 18      | 27.5    | \        | 10.0          | 405          | 1215          | 4.5                             | 20  | 33.3        | 90    | 0.8       | FAQ25K455G342GL5 |
| 250 | 5.0             | 32         | 33      | 18      | 27.5    | \        | 11.0          | 450          | 1350          | 4.0                             | 20  | 31.0        | 90    | 0.8       | FAQ25K505G342GL5 |
| 250 | 6.8             | 32         | 37      | 22      | 27.5    | \        | 14.0          | 612          | 1836          | 2.8                             | 22  | 27.3        | 90    | 1.0       | FAQ25K106G402GL5 |
| 250 | 4.7             | 42         | 30      | 16      | 37.5    | \        | 7.0           | 282          | 846           | 7.5                             | 24  | 40.8        | 60    | 1.0       | FAQ25K475K142KL5 |
| 250 | 5.0             | 42         | 30      | 16      | 37.5    | \        | 8.0           | 300          | 900           | 7.0                             | 24  | 33.5        | 60    | 1.0       | FAQ25K505K142KL5 |
| 250 | 6.0             | 42         | 30      | 16      | 37.5    | \        | 9.0           | 360          | 1080          | 6.0                             | 24  | 30.9        | 60    | 1.0       | FAQ25K605K142KL5 |
| 250 | 6.5             | 42         | 30      | 16      | 37.5    | \        | 10.0          | 390          | 1170          | 5.6                             | 24  | 26.8        | 60    | 1.0       | FAQ25K655K142KL5 |
| 250 | 6.8             | 42         | 32      | 19      | 37.5    | \        | 10.5          | 408          | 1224          | 5.4                             | 24  | 25.2        | 60    | 1.0       | FAQ25K685K212KL5 |
| 250 | 7.5             | 42         | 32      | 19      | 37.5    | \        | 11.0          | 450          | 1350          | 5.0                             | 24  | 24.8        | 60    | 1.0       | FAQ25K755K212KL5 |
| 250 | 8.0             | 42         | 37      | 22      | 37.5    | \        | 12.0          | 480          | 1440          | 4.5                             | 24  | 23.1        | 60    | 1.0       | FAQ25K805K274KL5 |
| 250 | 10              | 42         | 37      | 22      | 37.5    | \        | 13.0          | 600          | 1800          | 3.6                             | 24  | 24.7        | 60    | 1.0       | FAQ25K106K274KL5 |
| 250 | 12              | 42         | 44      | 24      | 37.5    | \        | 14.0          | 720          | 2160          | 3.0                             | 24  | 25.5        | 60    | 1.0       | FAQ25K126K324KL5 |
| 250 | 15              | 42         | 44      | 24      | 37.5    | \        | 14.0          | 900          | 2700          | 2.5                             | 24  | 30.6        | 60    | 1.0       | FAQ25K156K322KL5 |
| 250 | 18              | 42         | 43      | 28      | 37.5    | \        | 15.0          | 1080         | 3240          | 2.2                             | 26  | 30.3        | 60    | 1.0       | FAQ25K186K392KL5 |
| 250 | 20              | 42         | 45      | 30      | 37.5    | \        | 15.0          | 1200         | 3600          | 2.0                             | 26  | 33.3        | 60    | 1.0       | FAQ25K206K422KL5 |
| 250 | 22              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0          | 1320         | 3960          | 1.8                             | 28  | 25.7        | 60    | 1.2       | FAQ25K226K474KD5 |
| 250 | 25              | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.0          | 750          | 2250          | 3.2                             | 30  | 14.5        | 30    | 1.2       | FAQ25K256M164MD5 |
| 250 | 30              | 57.5       | 45      | 30      | 52.5    | 20.3     | 20.0          | 900          | 2700          | 2.8                             | 30  | 13.4        | 30    | 1.2       | FAQ25K306M164MD5 |
| 250 | 35              | 57.5       | 50      | 35      | 52.5    | 20.3     | 24.0          | 1050         | 3150          | 2.4                             | 32  | 10.9        | 30    | 1.2       | FAQ25K356M204MD5 |
| 250 | 40              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 26.0          | 1200         | 3600          | 2.0                             | 32  | 11.1        | 30    | 1.2       | FAQ25K406M474MD5 |
| 300 | 1.0             | 32         | 20      | 11      | 27.5    | \        | 4.0           | 90           | 270           | 12.5                            | 16  | 75.0        | 90    | 0.8       | FAQ30K105G182GL5 |
| 300 | 1.5             | 32         | 22      | 13      | 27.5    | \        | 5.0           | 135          | 405           | 8.5                             | 16  | 70.6        | 90    | 0.8       | FAQ30K155G212GL5 |
| 300 | 2.0             | 32         | 24.5    | 15      | 27.5    | \        | 6.0           | 180          | 540           | 7.5                             | 16  | 55.6        | 90    | 0.8       | FAQ30K225G272GL5 |
| 300 | 2.2             | 32         | 24.5    | 15      | 27.5    | \        | 7.0           | 198          | 594           | 6.8                             | 16  | 45.0        | 90    | 0.8       | FAQ30K255G262GL5 |
| 300 | 2.5             | 32         | 28      | 14      | 27.5    | \        | 8.0           | 225          | 675           | 6.5                             | 18  | 36.1        | 90    | 0.8       | FAQ30K305G332GL5 |
| 300 | 3.0             | 32         | 28      | 18      | 27.5    | \        | 9.0           | 270          | 810           | 6.0                             | 20  | 30.9        | 90    | 0.8       | FAQ30K355G342GL5 |
| 300 | 3.3             | 32         | 33      | 18      | 27.5    | \        | 10.0          | 297          | 891           | 4.8                             | 20  | 31.3        | 90    | 0.8       | FAQ30K405G342GL5 |
| 300 | 3.5             | 32         | 33      | 18      | 27.5    | \        | 10.5          | 315          | 945           | 4.6                             | 20  | 29.6        | 90    | 0.8       | FAQ30K455G402GL5 |
| 300 | 4.0             | 32         | 33      | 18      | 27.5    | \        | 11.0          | 360          | 1080          | 4.2                             | 20  | 29.5        | 90    | 0.8       | FAQ30K505G402GL5 |
| 300 | 4.7             | 32         | 37      | 22      | 27.5    | \        | 13.0          | 423          | 1269          | 3.8                             | 22  | 23.4        | 90    | 1.0       | FAQ30K475G402GL5 |
| 300 | 5.0             | 32         | 37      | 22      | 27.5    | \        | 13.5          | 450          | 1350          | 3.6                             | 22  | 22.9        | 90    | 1.0       | FAQ30K505G402GL5 |
| 300 | 5.6             | 32         | 37      | 22      | 27.5    | \        | 14.0          | 504          | 1512          | 3.0                             | 22  | 25.5        | 90    | 1.0       | FAQ30K565G402GL5 |

# Metalized Polypropylene Film AC Filtering Capacitors

## FAQ Series - 180VAC ~ 760VAC (Automotive Grade)



### Rating and Part Number

| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|-----|-------------|-------|-----------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |     |             |       |           |                  |
| 300 | 3.0             | 42         | 30      | 16      | 37.5    | \        | 6.0           | 180          | 540           | 9.0                             | 24  | 46.3        | 60    | 1.0       | FAQ30K305K142KL5 |
| 300 | 3.3             | 42         | 30      | 16      | 37.5    | \        | 7.0           | 198          | 594           | 8.5                             | 24  | 36.0        | 60    | 1.0       | FAQ30K335K142KL5 |
| 300 | 3.5             | 42         | 30      | 16      | 37.5    | \        | 7.0           | 210          | 630           | 8.0                             | 24  | 38.3        | 60    | 1.0       | FAQ30K355K142KL5 |
| 300 | 4.0             | 42         | 30      | 16      | 37.5    | \        | 8.0           | 240          | 720           | 6.8                             | 24  | 34.5        | 60    | 1.0       | FAQ30K405K142KL5 |
| 300 | 4.5             | 42         | 30      | 16      | 37.5    | \        | 9.0           | 270          | 810           | 6.0                             | 24  | 30.9        | 60    | 1.0       | FAQ30K455K142KL5 |
| 300 | 4.7             | 42         | 30      | 16      | 37.5    | \        | 9.0           | 282          | 846           | 5.8                             | 24  | 31.9        | 60    | 1.0       | FAQ30K475K142KL5 |
| 300 | 5.0             | 42         | 32      | 19      | 37.5    | \        | 10.0          | 300          | 900           | 5.5                             | 24  | 27.3        | 60    | 1.0       | FAQ30K505K212KL5 |
| 300 | 6.0             | 42         | 32      | 19      | 37.5    | \        | 11.0          | 360          | 1080          | 5.0                             | 24  | 24.8        | 60    | 1.0       | FAQ30K605K212KL5 |
| 300 | 6.8             | 42         | 37      | 22      | 37.5    | \        | 12.0          | 408          | 1224          | 4.5                             | 24  | 23.1        | 60    | 1.0       | FAQ30K685K274KL5 |
| 300 | 8.0             | 42         | 37      | 22      | 37.5    | \        | 13.0          | 480          | 1440          | 3.6                             | 24  | 24.7        | 60    | 1.0       | FAQ30K805K274KL5 |
| 300 | 10              | 42         | 44      | 24      | 37.5    | \        | 14.0          | 600          | 1800          | 3.0                             | 24  | 25.5        | 60    | 1.0       | FAQ30K106K324KL5 |
| 300 | 12              | 42         | 43      | 28      | 37.5    | \        | 15.0          | 720          | 2160          | 2.4                             | 26  | 27.8        | 60    | 1.0       | FAQ30K126K392KL5 |
| 300 | 15              | 42         | 45      | 30      | 37.5    | \        | 15.0          | 900          | 2700          | 2.2                             | 26  | 30.3        | 60    | 1.0       | FAQ30K156K422KL5 |
| 300 | 18              | 42         | 50      | 35      | 37.5    | 20.3     | 18.0          | 1080         | 3240          | 2.0                             | 28  | 23.1        | 60    | 1.2       | FAQ30K186K474KD5 |
| 300 | 18              | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.0          | 540          | 1620          | 3.5                             | 30  | 16.7        | 30    | 1.2       | FAQ30K186M164MD5 |
| 300 | 20              | 57.5       | 45      | 30      | 52.5    | 20.3     | 18.0          | 600          | 1800          | 3.2                             | 30  | 14.5        | 30    | 1.2       | FAQ30K206M164MD5 |
| 300 | 25              | 57.5       | 50      | 35      | 52.5    | 20.3     | 20.0          | 750          | 2250          | 3.0                             | 32  | 12.5        | 30    | 1.2       | FAQ30K256M204MD5 |
| 300 | 30              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 24.0          | 900          | 2700          | 2.4                             | 32  | 10.9        | 30    | 1.2       | FAQ30K306M474MD5 |
| 350 | 0.33            | 32         | 18      | 9       | 27.5    | \        | 1.5           | 33           | 99            | 45.0                            | 16  | 148.1       | 100   | 0.8       | FAQ35K334G152GL5 |
| 350 | 0.39            | 32         | 18      | 9       | 27.5    | \        | 1.6           | 39           | 117           | 40.0                            | 16  | 146.5       | 100   | 0.8       | FAQ35K394G152GL5 |
| 350 | 0.47            | 32         | 18      | 9       | 27.5    | \        | 2.0           | 47           | 141           | 35.0                            | 16  | 107.1       | 100   | 0.8       | FAQ35K474G152GL5 |
| 350 | 0.68            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 68           | 204           | 24.0                            | 16  | 100.0       | 100   | 0.8       | FAQ35K684G182GL5 |
| 350 | 0.82            | 32         | 22      | 13      | 27.5    | \        | 3.0           | 82           | 246           | 20.5                            | 16  | 81.3        | 100   | 0.8       | FAQ35K824G212GL5 |
| 350 | 1.0             | 32         | 22      | 13      | 27.5    | \        | 3.2           | 100          | 300           | 15.5                            | 16  | 94.5        | 100   | 0.8       | FAQ35K105G212GL5 |
| 350 | 1.5             | 32         | 24.5    | 15      | 27.5    | \        | 4.0           | 150          | 450           | 13.0                            | 16  | 72.1        | 100   | 0.8       | FAQ35K155G272GL5 |
| 350 | 2.0             | 32         | 28      | 18      | 27.5    | \        | 4.8           | 200          | 600           | 10.8                            | 18  | 60.3        | 100   | 0.8       | FAQ35K205G332GL5 |
| 350 | 2.2             | 32         | 28      | 18      | 27.5    | \        | 5.0           | 220          | 660           | 10.2                            | 18  | 58.8        | 100   | 0.8       | FAQ35K225G332GL5 |
| 350 | 2.5             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 250          | 750           | 7.0                             | 20  | 59.5        | 100   | 0.8       | FAQ35K255G342GL5 |
| 350 | 3.0             | 32         | 37      | 22      | 27.5    | \        | 7.0           | 300          | 900           | 5.8                             | 22  | 52.8        | 100   | 1.0       | FAQ35K305G402GL5 |
| 350 | 3.3             | 32         | 37      | 22      | 27.5    | \        | 7.5           | 330          | 990           | 5.2                             | 22  | 51.3        | 100   | 1.0       | FAQ35K335G402GL5 |
| 350 | 3.5             | 32         | 37      | 22      | 27.5    | \        | 7.8           | 350          | 1050          | 5.0                             | 22  | 49.3        | 100   | 1.0       | FAQ35K355G402GL5 |
| 350 | 4.0             | 32         | 37      | 22      | 27.5    | \        | 8.0           | 400          | 1200          | 4.5                             | 22  | 52.1        | 100   | 1.0       | FAQ35K405G402GL5 |
| 350 | 2.0             | 42         | 30      | 16      | 37.5    | \        | 4.5           | 140          | 420           | 12.8                            | 24  | 57.9        | 70    | 1.0       | FAQ35K205K142KL5 |
| 350 | 2.2             | 42         | 30      | 16      | 37.5    | \        | 4.8           | 154          | 462           | 12.5                            | 24  | 52.1        | 70    | 1.0       | FAQ35K225K142KL5 |
| 350 | 2.5             | 42         | 30      | 16      | 37.5    | \        | 5.2           | 175          | 525           | 11.8                            | 24  | 47.0        | 70    | 1.0       | FAQ35K255K142KL5 |
| 350 | 3.0             | 42         | 30      | 16      | 37.5    | \        | 5.5           | 210          | 630           | 10.8                            | 24  | 45.9        | 70    | 1.0       | FAQ35K305K142KL5 |
| 350 | 3.3             | 42         | 30      | 16      | 37.5    | \        | 6.0           | 231          | 693           | 8.8                             | 24  | 47.3        | 70    | 1.0       | FAQ35K335K142KL5 |
| 350 | 3.5             | 42         | 30      | 16      | 37.5    | \        | 6.5           | 245          | 735           | 8.6                             | 24  | 41.3        | 70    | 1.0       | FAQ35K355K142KL5 |
| 350 | 4.0             | 42         | 32      | 19      | 37.5    | \        | 7.0           | 280          | 840           | 8.0                             | 24  | 38.3        | 70    | 1.0       | FAQ35K405K212KL5 |
| 350 | 4.5             | 42         | 37      | 22      | 37.5    | \        | 8.0           | 315          | 945           | 7.0                             | 24  | 33.5        | 70    | 1.0       | FAQ35K455K274KL5 |
| 350 | 5.0             | 42         | 37      | 22      | 37.5    | \        | 8.5           | 350          | 1050          | 6.8                             | 24  | 30.5        | 70    | 1.0       | FAQ35K505K274KL5 |
| 350 | 5.5             | 42         | 37      | 22      | 37.5    | \        | 8.8           | 385          | 1155          | 6.4                             | 24  | 30.3        | 70    | 1.0       | FAQ35K555K274KL5 |
| 350 | 6.0             | 42         | 44      | 24      | 37.5    | \        | 9.5           | 420          | 1260          | 6.0                             | 24  | 27.7        | 70    | 1.0       | FAQ35K605K324KL5 |
| 350 | 6.5             | 42         | 44      | 24      | 37.5    | \        | 10.0          | 455          | 1365          | 5.5                             | 24  | 27.3        | 70    | 1.0       | FAQ35K655K324KL5 |
| 350 | 7.0             | 42         | 44      | 24      | 37.5    | \        | 10.5          | 490          | 1470          | 5.2                             | 24  | 26.2        | 70    | 1.0       | FAQ35K705K324KL5 |
| 350 | 8.0             | 42         | 44      | 24      | 37.5    | \        | 10.5          | 560          | 1680          | 5.2                             | 24  | 26.2        | 70    | 1.0       | FAQ35K805K324KL5 |
| 350 | 8.5             | 42         | 43      | 28      | 37.5    | \        | 11.0          | 595          | 1785          | 4.8                             | 26  | 25.8        | 70    | 1.0       | FAQ35K855K392KL5 |
| 350 | 9.0             | 42         | 43      | 28      | 37.5    | \        | 11.0          | 630          | 1890          | 4.6                             | 26  | 26.9        | 70    | 1.0       | FAQ35K905K392KL5 |
| 350 | 9.5             | 42         | 45      | 30      | 37.5    | \        | 11.5          | 665          | 1995          | 4.4                             | 26  | 25.8        | 70    | 1.0       | FAQ35K955K422KL5 |
| 350 | 10              | 42         | 45      | 30      | 37.5    | \        | 12.0          | 700          | 2100          | 4.2                             | 26  | 24.8        | 70    | 1.0       | FAQ35K106K422KL5 |
| 350 | 12              | 42         | 50      | 35      | 37.5    | 20.3     | 14.0          | 840          | 2520          | 3.6                             | 28  | 21.3        | 70    | 1.2       | FAQ35K126K474KD5 |
| 350 | 15              | 57.5       | 45      | 30      | 52.5    | 20.3     | 16.5          | 600          | 1800          | 3.5                             | 30  | 15.7        | 40    | 1.2       | FAQ35K156M164MD5 |
| 350 | 18              | 57.5       | 50      | 35      | 52.5    | 20.3     | 18.0          | 720          | 2160          | 3.0                             | 32  | 15.4        | 40    | 1.2       | FAQ35K186M204MD5 |
| 350 | 20              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 20.0          | 800          | 2400          | 2.8                             | 32  | 13.4        | 40    | 1.2       | FAQ35K206M474MD5 |
| 350 | 22              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 22.0          | 880          | 2640          | 2.6                             | 32  | 11.9        | 40    | 1.2       | FAQ35K226M474MD5 |
| 350 | 25              | 57.5       | 55      | 45      | 52.5    | 20.3     | 24.0          | 1000         | 3000          | 2.4                             | 32  | 10.9        | 40    | 1.2       | FAQ35K256M324MD5 |

## Rating and Part Number

| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz<br>A 70°C | Peak Current<br>A | Surge Current<br>A | ESR <sub>Typical</sub><br>10KHz<br>mΩ | ESL<br>nH | Thermal Res<br>°C/W | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|-------------------------|-------------------|--------------------|---------------------------------------|-----------|---------------------|---------------|-----------------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |                         |                   |                    |                                       |           |                     |               |                 |                  |
| 350 | 30              | 57.5       | 65      | 45      | 52.5    | 20.3     | 26.0                    | 1200              | 3600               | 2.2                                   | 32        | 10.1                | 40            | 1.2             | FAQ35K306M344MD5 |
| 400 | 0.33            | 32         | 18      | 9       | 27.5    | \        | 1.5                     | 40                | 119                | 45.0                                  | 16        | 148.1               | 120           | 0.8             | FAQ40K334G152GL5 |
| 400 | 0.39            | 32         | 18      | 9       | 27.5    | \        | 1.6                     | 47                | 140                | 40.0                                  | 16        | 146.5               | 120           | 0.8             | FAQ40K394G152GL5 |
| 400 | 0.47            | 32         | 18      | 9       | 27.5    | \        | 2.0                     | 56                | 169                | 35.0                                  | 16        | 107.1               | 120           | 0.8             | FAQ40K474G152GL5 |
| 400 | 0.68            | 32         | 20      | 11      | 27.5    | \        | 2.5                     | 82                | 245                | 24.0                                  | 16        | 100.0               | 120           | 0.8             | FAQ40K684G182GL5 |
| 400 | 0.82            | 32         | 22      | 13      | 27.5    | \        | 3.0                     | 98                | 295                | 20.5                                  | 16        | 81.3                | 120           | 0.8             | FAQ40K824G212GL5 |
| 400 | 1.0             | 32         | 24      | 14      | 27.5    | \        | 3.2                     | 120               | 360                | 15.5                                  | 16        | 94.5                | 120           | 0.8             | FAQ40K105G252GL5 |
| 400 | 1.5             | 32         | 28      | 18      | 27.5    | \        | 4.8                     | 180               | 540                | 10.8                                  | 18        | 60.3                | 120           | 0.8             | FAQ40K155G332GL5 |
| 400 | 2.0             | 32         | 33      | 18      | 27.5    | \        | 6.0                     | 240               | 720                | 7.0                                   | 20        | 59.5                | 120           | 0.8             | FAQ40K205G342GL5 |
| 400 | 2.2             | 32         | 33      | 18      | 27.5    | \        | 6.0                     | 264               | 792                | 7.0                                   | 20        | 59.5                | 120           | 0.8             | FAQ40K225G342GL5 |
| 400 | 2.5             | 32         | 37      | 22      | 27.5    | \        | 7.0                     | 300               | 900                | 5.8                                   | 22        | 52.8                | 120           | 1.0             | FAQ40K255G402GL5 |
| 400 | 3.0             | 32         | 37      | 22      | 27.5    | \        | 7.5                     | 360               | 1080               | 5.2                                   | 22        | 51.3                | 120           | 1.0             | FAQ40K305G402GL5 |
| 400 | 2.0             | 42         | 30      | 16      | 37.5    | \        | 4.5                     | 160               | 480                | 12.8                                  | 24        | 57.9                | 80            | 1.0             | FAQ40K205K142KL5 |
| 400 | 2.2             | 42         | 30      | 16      | 37.5    | \        | 4.8                     | 176               | 528                | 12.5                                  | 24        | 52.1                | 80            | 1.0             | FAQ40K225K142KL5 |
| 400 | 2.5             | 42         | 30      | 16      | 37.5    | \        | 5.2                     | 200               | 600                | 11.8                                  | 24        | 47.0                | 80            | 1.0             | FAQ40K255K142KL5 |
| 400 | 3.0             | 42         | 32      | 19      | 37.5    | \        | 6.0                     | 240               | 720                | 8.8                                   | 24        | 47.3                | 80            | 1.0             | FAQ40K305K212KL5 |
| 400 | 3.3             | 42         | 32      | 19      | 37.5    | \        | 6.5                     | 264               | 792                | 8.6                                   | 24        | 41.3                | 80            | 1.0             | FAQ40K335K212KL5 |
| 400 | 3.5             | 42         | 37      | 22      | 37.5    | \        | 7.0                     | 280               | 840                | 8.0                                   | 24        | 38.3                | 80            | 1.0             | FAQ40K355K274KL5 |
| 400 | 4.0             | 42         | 37      | 22      | 37.5    | \        | 8.0                     | 320               | 960                | 7.0                                   | 24        | 33.5                | 80            | 1.0             | FAQ40K405K274KL5 |
| 400 | 4.5             | 42         | 37      | 22      | 37.5    | \        | 8.5                     | 360               | 1080               | 6.8                                   | 24        | 30.5                | 80            | 1.0             | FAQ40K455K274KL5 |
| 400 | 5.0             | 42         | 44      | 24      | 37.5    | \        | 9.5                     | 400               | 1200               | 6.0                                   | 24        | 27.7                | 80            | 1.0             | FAQ40K505K324KL5 |
| 400 | 5.5             | 42         | 44      | 24      | 37.5    | \        | 10.0                    | 440               | 1320               | 5.5                                   | 24        | 27.3                | 80            | 1.0             | FAQ40K555K324KL5 |
| 400 | 6.0             | 42         | 43      | 28      | 37.5    | \        | 10.5                    | 480               | 1440               | 4.8                                   | 26        | 28.3                | 80            | 1.0             | FAQ40K605K392KL5 |
| 400 | 6.5             | 42         | 43      | 28      | 37.5    | \        | 10.5                    | 520               | 1560               | 4.6                                   | 26        | 29.6                | 80            | 1.0             | FAQ40K655K392KL5 |
| 400 | 7.0             | 42         | 43      | 28      | 37.5    | \        | 11.0                    | 560               | 1680               | 4.4                                   | 26        | 28.2                | 80            | 1.0             | FAQ40K705K392KL5 |
| 400 | 7.5             | 42         | 45      | 30      | 37.5    | \        | 11.0                    | 600               | 1800               | 4.4                                   | 26        | 28.2                | 80            | 1.0             | FAQ40K755K422KL5 |
| 400 | 8.0             | 42         | 45      | 30      | 37.5    | \        | 11.5                    | 640               | 1920               | 4.2                                   | 26        | 27.0                | 80            | 1.0             | FAQ40K805K422KL5 |
| 400 | 9.0             | 42         | 50      | 35      | 37.5    | 20.3     | 12.5                    | 720               | 2160               | 4.0                                   | 28        | 24.0                | 80            | 1.2             | FAQ40K905K474KD5 |
| 400 | 10              | 42         | 50      | 35      | 37.5    | 20.3     | 14.0                    | 800               | 2400               | 3.6                                   | 28        | 21.3                | 80            | 1.2             | FAQ40K106K474KD5 |
| 400 | 10              | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5                    | 500               | 1500               | 4.2                                   | 30        | 22.9                | 50            | 1.2             | FAQ40K106M164MD5 |
| 400 | 12              | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.0                    | 600               | 1800               | 3.8                                   | 32        | 20.1                | 50            | 1.2             | FAQ40K126M204MD5 |
| 400 | 14              | 57.5       | 50      | 35      | 52.5    | 20.3     | 16.0                    | 700               | 2100               | 3.6                                   | 32        | 16.3                | 50            | 1.2             | FAQ40K146M204MD5 |
| 400 | 18              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 20.0                    | 900               | 2700               | 3.0                                   | 32        | 12.5                | 50            | 1.2             | FAQ40K186M474MD5 |
| 400 | 20              | 57.5       | 55      | 45      | 52.5    | 20.3     | 22.0                    | 1000              | 3000               | 2.8                                   | 32        | 11.1                | 50            | 1.2             | FAQ40K206M324MD5 |
| 400 | 22              | 57.5       | 65      | 45      | 52.5    | 20.3     | 24.0                    | 1100              | 3300               | 2.5                                   | 32        | 10.4                | 50            | 1.2             | FAQ40K226M344MD5 |
| 400 | 25              | 57.5       | 65      | 45      | 52.5    | 20.3     | 26.0                    | 1250              | 3750               | 2.2                                   | 32        | 10.1                | 50            | 1.2             | FAQ40K256M344MD5 |
| 500 | 0.22            | 32         | 18      | 9       | 27.5    | \        | 1.5                     | 31                | 92                 | 45.0                                  | 16        | 148.1               | 140           | 0.8             | FAQ50K224G152GL5 |
| 500 | 0.27            | 32         | 18      | 9       | 27.5    | \        | 1.6                     | 38                | 113                | 40.0                                  | 16        | 146.5               | 140           | 0.8             | FAQ50K274G152GL5 |
| 500 | 0.33            | 32         | 20      | 11      | 27.5    | \        | 2.5                     | 46                | 139                | 24.0                                  | 16        | 100.0               | 140           | 0.8             | FAQ50K334G182GL5 |
| 500 | 0.39            | 32         | 20      | 11      | 27.5    | \        | 2.5                     | 55                | 164                | 24.0                                  | 16        | 100.0               | 140           | 0.8             | FAQ50K394G182GL5 |
| 500 | 0.47            | 32         | 22      | 13      | 27.5    | \        | 2.8                     | 66                | 197                | 21.5                                  | 16        | 89.0                | 140           | 0.8             | FAQ50K474G212GL5 |
| 500 | 0.56            | 32         | 22      | 13      | 27.5    | \        | 3.0                     | 78                | 235                | 20.5                                  | 16        | 81.3                | 140           | 0.8             | FAQ50K564G212GL5 |
| 500 | 0.68            | 32         | 24.5    | 15      | 27.5    | \        | 3.5                     | 95                | 286                | 15.5                                  | 16        | 79.0                | 140           | 0.8             | FAQ50K684G272GL5 |
| 500 | 0.82            | 32         | 28      | 18      | 27.5    | \        | 4.8                     | 115               | 344                | 12.5                                  | 18        | 52.1                | 140           | 0.8             | FAQ50K824G332GL5 |
| 500 | 1.0             | 32         | 33      | 18      | 27.5    | \        | 6.0                     | 140               | 420                | 9.0                                   | 20        | 46.3                | 140           | 0.8             | FAQ50K105G342GL5 |
| 500 | 1.2             | 32         | 33      | 18      | 27.5    | \        | 6.0                     | 168               | 504                | 9.0                                   | 20        | 46.3                | 140           | 0.8             | FAQ50K125G342GL5 |
| 500 | 1.5             | 32         | 37      | 22      | 27.5    | \        | 7.0                     | 210               | 630                | 8.5                                   | 22        | 36.0                | 140           | 1.0             | FAQ50K155G402GL5 |
| 500 | 1.8             | 32         | 37      | 22      | 27.5    | \        | 7.5                     | 252               | 756                | 7.8                                   | 22        | 34.2                | 140           | 1.0             | FAQ50K185G402GL5 |
| 500 | 1.0             | 42         | 30      | 16      | 37.5    | \        | 4.5                     | 90                | 270                | 12.8                                  | 24        | 57.9                | 90            | 1.0             | FAQ50K105K142KL5 |
| 500 | 1.2             | 42         | 30      | 16      | 37.5    | \        | 4.8                     | 108               | 324                | 12.5                                  | 24        | 52.1                | 90            | 1.0             | FAQ50K125K142KL5 |
| 500 | 1.5             | 42         | 30      | 16      | 37.5    | \        | 5.2                     | 135               | 405                | 11.8                                  | 24        | 47.0                | 90            | 1.0             | FAQ50K155K142KL5 |
| 500 | 1.8             | 42         | 32      | 19      | 37.5    | \        | 6.0                     | 162               | 486                | 9.0                                   | 24        | 46.3                | 90            | 1.0             | FAQ50K185K212KL5 |
| 500 | 2.0             | 42         | 32      | 19      | 37.5    | \        | 6.5                     | 180               | 540                | 8.6                                   | 24        | 41.3                | 90            | 1.0             | FAQ50K205K212KL5 |
| 500 | 2.5             | 42         | 37      | 22      | 37.5    | \        | 7.0                     | 225               | 675                | 8.0                                   | 24        | 38.3                | 90            | 1.0             | FAQ50K255K274KL5 |
| 500 | 2.8             | 42         | 37      | 22      | 37.5    | \        | 8.0                     | 252               | 756                | 7.0                                   | 24        | 33.5                | 90            | 1.0             | FAQ50K285K274KL5 |
| 500 | 3.0             | 42         | 37      | 22      | 37.5    | \        | 8.5                     | 270               | 810                | 6.8                                   | 24        | 30.5                | 90            | 1.0             | FAQ50K305K274KL5 |

# Metallized Polypropylene Film AC Filtering Capacitors

## FAQ Series - 180VAC ~ 760VAC (Automotive Grade)



### Rating and Part Number

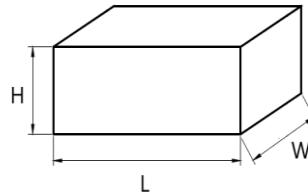
| Vac | Cap Value<br>μF | Dimensions |         |         |         |          | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL  | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|---------|---------|---------|----------|---------------|--------------|---------------|---------------------------------|------|-------------|-------|-----------|------------------|
|     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm | P1<br>mm |               |              |               |                                 |      |             |       |           |                  |
|     |                 | A          | 70°C    |         |         |          | A             | A            | mΩ            | nH                              | °C/W | V/us        | mm    |           |                  |
| 500 | 3.5             | 42         | 44      | 24      | 37.5    | \        | 9.5           | 315          | 945           | 6.0                             | 24   | 27.7        | 90    | 1.0       | FAQ50K355K324KL5 |
| 500 | 4.0             | 42         | 43      | 28      | 37.5    | \        | 10.5          | 360          | 1080          | 4.8                             | 26   | 28.3        | 90    | 1.0       | FAQ50K405K392KL5 |
| 500 | 4.5             | 42         | 43      | 28      | 37.5    | \        | 10.5          | 405          | 1215          | 4.8                             | 26   | 28.3        | 90    | 1.0       | FAQ50K455K392KL5 |
| 500 | 5.0             | 42         | 45      | 30      | 37.5    | \        | 11.0          | 450          | 1350          | 4.5                             | 26   | 27.5        | 90    | 1.0       | FAQ50K505K422KL5 |
| 500 | 5.5             | 42         | 50      | 35      | 37.5    | 20.3     | 12.5          | 495          | 1485          | 4.2                             | 28   | 22.9        | 90    | 1.2       | FAQ50K555K474KD5 |
| 500 | 6.0             | 42         | 50      | 35      | 37.5    | 20.3     | 14.0          | 540          | 1620          | 3.8                             | 28   | 20.1        | 90    | 1.2       | FAQ50K605K474KD5 |
| 500 | 7.0             | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5          | 420          | 1260          | 4.2                             | 30   | 22.9        | 60    | 1.2       | FAQ50K705M164MD5 |
| 500 | 8.0             | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.0          | 480          | 1440          | 3.8                             | 32   | 20.1        | 60    | 1.2       | FAQ50K805M204MD5 |
| 500 | 9.0             | 57.5       | 50      | 35      | 52.5    | 20.3     | 16.0          | 540          | 1620          | 3.6                             | 32   | 16.3        | 60    | 1.2       | FAQ50K905M204MD5 |
| 500 | 10              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 18.0          | 600          | 1800          | 3.4                             | 32   | 13.6        | 60    | 1.2       | FAQ50K106M474MD5 |
| 500 | 12              | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 20.0          | 720          | 2160          | 3.2                             | 32   | 11.7        | 60    | 1.2       | FAQ50K126M474MD5 |
| 500 | 15              | 57.5       | 65      | 45      | 52.5    | 20.3     | 22.0          | 900          | 2700          | 3.0                             | 32   | 10.3        | 60    | 1.2       | FAQ50K156M344MD5 |
| 600 | 0.15            | 32         | 18      | 9       | 27.5    | \        | 1.5           | 24           | 72            | 45.0                            | 16   | 148.1       | 160   | 0.8       | FAQ60K154G152GL5 |
| 600 | 0.22            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 35           | 106           | 24.0                            | 16   | 100.0       | 160   | 0.8       | FAQ60K224G182GL5 |
| 600 | 0.33            | 32         | 22      | 13      | 27.5    | \        | 2.8           | 53           | 158           | 21.5                            | 16   | 89.0        | 160   | 0.8       | FAQ60K334G212GL5 |
| 600 | 0.47            | 32         | 24.5    | 15      | 27.5    | \        | 3.2           | 75           | 226           | 15.5                            | 16   | 94.5        | 160   | 0.8       | FAQ60K474G272GL5 |
| 600 | 0.56            | 32         | 28      | 14      | 27.5    | \        | 4.0           | 90           | 269           | 12.5                            | 18   | 75.0        | 160   | 0.8       | FAQ60K564G262GL5 |
| 600 | 0.68            | 32         | 28      | 18      | 27.5    | \        | 4.8           | 109          | 326           | 10.8                            | 18   | 60.3        | 160   | 0.8       | FAQ60K684G332GL5 |
| 600 | 0.82            | 32         | 33      | 18      | 27.5    | \        | 6.0           | 131          | 394           | 7.0                             | 20   | 59.5        | 160   | 0.8       | FAQ60K824G342GL5 |
| 600 | 1.0             | 32         | 33      | 18      | 27.5    | \        | 6.0           | 160          | 480           | 7.0                             | 20   | 59.5        | 160   | 0.8       | FAQ60K105G342GL5 |
| 600 | 1.2             | 32         | 37      | 22      | 27.5    | \        | 7.0           | 192          | 576           | 5.8                             | 22   | 52.8        | 160   | 1.0       | FAQ60K125G402GL5 |
| 600 | 1.0             | 42         | 30      | 16      | 37.5    | \        | 4.5           | 100          | 300           | 12.8                            | 24   | 57.9        | 100   | 1.0       | FAQ60K105K142KL5 |
| 600 | 1.2             | 42         | 32      | 19      | 37.5    | \        | 6.0           | 120          | 360           | 8.8                             | 24   | 47.3        | 100   | 1.0       | FAQ60K125K212KL5 |
| 600 | 1.5             | 42         | 32      | 19      | 37.5    | \        | 6.5           | 150          | 450           | 8.6                             | 24   | 41.3        | 100   | 1.0       | FAQ60K155K212KL5 |
| 600 | 1.8             | 42         | 37      | 22      | 37.5    | \        | 7.0           | 180          | 540           | 8.0                             | 24   | 38.3        | 100   | 1.0       | FAQ60K185K274KL5 |
| 600 | 2.0             | 42         | 37      | 22      | 37.5    | \        | 8.0           | 200          | 600           | 7.0                             | 24   | 33.5        | 100   | 1.0       | FAQ60K205K274KL5 |
| 600 | 2.2             | 42         | 44      | 24      | 37.5    | \        | 9.0           | 220          | 660           | 6.5                             | 24   | 28.5        | 100   | 1.0       | FAQ60K225K324KL5 |
| 600 | 2.5             | 42         | 44      | 24      | 37.5    | \        | 9.5           | 250          | 750           | 6.0                             | 24   | 27.7        | 100   | 1.0       | FAQ60K255K324KL5 |
| 600 | 2.8             | 42         | 43      | 28      | 37.5    | \        | 10.0          | 280          | 840           | 5.5                             | 26   | 27.3        | 100   | 1.0       | FAQ60K285K392KL5 |
| 600 | 3.0             | 42         | 45      | 30      | 37.5    | \        | 10.5          | 300          | 900           | 5.0                             | 26   | 27.2        | 100   | 1.0       | FAQ60K305K422KL5 |
| 600 | 3.5             | 42         | 50      | 35      | 37.5    | 20.3     | 12.5          | 350          | 1050          | 4.5                             | 28   | 21.3        | 100   | 1.2       | FAQ60K335K474KD5 |
| 600 | 4.0             | 42         | 50      | 35      | 37.5    | 20.3     | 14.0          | 400          | 1200          | 4.0                             | 28   | 19.1        | 100   | 1.2       | FAQ60K405K474KD5 |
| 600 | 4.5             | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5          | 315          | 945           | 4.5                             | 30   | 21.3        | 70    | 1.2       | FAQ60K505M164MD5 |
| 600 | 5.0             | 57.5       | 45      | 30      | 52.5    | 20.3     | 13.5          | 350          | 1050          | 4.2                             | 30   | 19.6        | 70    | 1.2       | FAQ60K605M204MD5 |
| 600 | 6.0             | 57.5       | 50      | 35      | 52.5    | 20.3     | 14.0          | 420          | 1260          | 4.0                             | 32   | 19.1        | 70    | 1.2       | FAQ60K655M204MD5 |
| 600 | 6.5             | 57.5       | 50      | 35      | 52.5    | 20.3     | 16.0          | 455          | 1365          | 3.8                             | 32   | 15.4        | 70    | 1.2       | FAQ60K705M474MD5 |
| 600 | 7.0             | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 18.0          | 490          | 1470          | 3.6                             | 32   | 12.9        | 70    | 1.2       | FAQ60K755M474MD5 |
| 600 | 7.5             | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 19.0          | 525          | 1575          | 3.4                             | 32   | 12.2        | 70    | 1.2       | FAQ60K805M474MD5 |
| 600 | 8.0             | 57.5       | 57.5    | 38      | 52.5    | 20.3     | 20.0          | 560          | 1680          | 3.2                             | 32   | 11.7        | 70    | 1.2       | FAQ60K106M344MD5 |
| 600 | 10              | 57.5       | 65      | 45      | 52.5    | 20.3     | 22.0          | 700          | 2100          | 3.0                             | 32   | 10.3        | 70    | 1.2       | FAQ60K155K324KL5 |
| 760 | 0.1             | 32         | 18      | 9       | 27.5    | \        | 1.5           | 20           | 60            | 45.0                            | 16   | 148.1       | 200   | 0.8       | FAQ76K104G152GL5 |
| 760 | 0.15            | 32         | 20      | 11      | 27.5    | \        | 2.5           | 30           | 90            | 24.0                            | 16   | 100.0       | 200   | 0.8       | FAQ76K154G182GL5 |
| 760 | 0.22            | 32         | 22      | 13      | 27.5    | \        | 2.8           | 44           | 132           | 21.5                            | 16   | 89.0        | 200   | 0.8       | FAQ76K224G212GL5 |
| 760 | 0.33            | 32         | 24.5    | 15      | 27.5    | \        | 3.2           | 66           | 198           | 15.5                            | 16   | 94.5        | 200   | 0.8       | FAQ76K334G272GL5 |
| 760 | 0.47            | 32         | 28      | 18      | 27.5    | \        | 4.5           | 94           | 282           | 12.0                            | 18   | 61.7        | 200   | 0.8       | FAQ76K474G332GL5 |
| 760 | 0.56            | 32         | 33      | 18      | 27.5    | \        | 5.0           | 112          | 336           | 10.5                            | 20   | 57.1        | 200   | 0.8       | FAQ76K564G342GL5 |
| 760 | 0.68            | 32         | 37      | 22      | 27.5    | \        | 6.0           | 136          | 408           | 9.5                             | 22   | 43.9        | 200   | 1.0       | FAQ76K684G402GL5 |
| 760 | 0.68            | 42         | 30      | 16      | 37.5    | \        | 4.5           | 82           | 245           | 12.8                            | 24   | 57.9        | 120   | 1.0       | FAQ76K684K142KL5 |
| 760 | 0.82            | 42         | 32      | 19      | 37.5    | \        | 5.5           | 98           | 295           | 10.0                            | 24   | 49.6        | 120   | 1.0       | FAQ76K824K212KL5 |
| 760 | 1.0             | 42         | 32      | 19      | 37.5    | \        | 6.5           | 120          | 360           | 9.0                             | 24   | 39.4        | 120   | 1.0       | FAQ76K105K212KL5 |
| 760 | 1.2             | 42         | 37      | 22      | 37.5    | \        | 7.0           | 144          | 432           | 8.5                             | 24   | 36.0        | 120   | 1.0       | FAQ76K125K274KL5 |
| 760 | 1.5             | 42         | 44      | 24      | 37.5    | \        | 8.0           | 180          | 540           | 7.5                             | 24   | 31.3        | 120   | 1.0       | FAQ76K155K324KL5 |
| 760 | 1.8             | 42         | 43      | 28      | 37.5    | \        | 9.5           | 216          | 648           | 6.5                             | 26   | 25.6        | 120   | 1.0       | FAQ76K185K392KL5 |
| 760 | 2.0             | 42         | 45      | 30      | 37.5    | \        | 10.5          | 240          | 720           | 5.0                             | 26   | 27.2        | 120   | 1.0       | FAQ76K205K422KL5 |
| 760 | 2.5             | 42         | 50      | 35      | 37.5    | 20.3     | 12.5          | 300          | 900           | 4.5                             | 28   | 21.3        | 120   | 1.2       | FAQ76K255K474KD5 |
| 760 | 3.0             | 57.5       | 45      | 30      | 52.5    | 20.3     | 12.5          | 240          | 720           | 4.5                             | 30   | 21.3        | 80    | 1.2       | FAQ76K305M164MD5 |

### Rating and Part Number

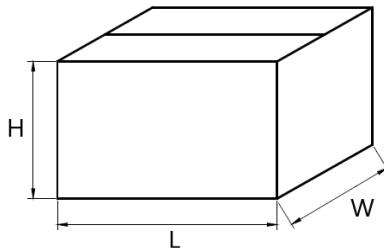
| Vac | Cap Value<br>$\mu\text{F}$ | Dimensions |      |    |      |      | Irms<br>10KHz | Peak Current | Surge Current | ESR <sub>Typical</sub><br>10KHz | ESL  | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|----------------------------|------------|------|----|------|------|---------------|--------------|---------------|---------------------------------|------|-------------|-------|-----------|------------------|
|     |                            | W          | H    | T  | P    | P1   |               |              |               |                                 |      |             |       |           |                  |
|     |                            | mm         | mm   | mm | mm   | mm   | A 70°C        | A            | mΩ            | nH                              | °C/W | V/us        | mm    | mm        |                  |
| 760 | 4.0                        | 57.5       | 50   | 35 | 52.5 | 20.3 | 14.0          | 320          | 960           | 4.0                             | 32   | 19.1        | 80    | 1.2       | FAQ76K405M204MD5 |
| 760 | 5.0                        | 57.5       | 57.5 | 38 | 52.5 | 20.3 | 16.0          | 400          | 1200          | 3.6                             | 32   | 16.3        | 80    | 1.2       | FAQ76K505M474MD5 |
| 760 | 6.0                        | 57.5       | 55   | 45 | 52.5 | 20.3 | 18.0          | 480          | 1440          | 3.4                             | 32   | 13.6        | 80    | 1.2       | FAQ76K605M324MD5 |
| 760 | 7.0                        | 57.5       | 65   | 45 | 52.5 | 20.3 | 20.0          | 560          | 1680          | 3.2                             | 32   | 11.7        | 80    | 1.2       | FAQ76K705M344MD5 |

## Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



## Packaging Quantity

| Pitch | Size Code | Dimension |      |    | Packaging Quantity |             |
|-------|-----------|-----------|------|----|--------------------|-------------|
|       |           | W         | H    | T  | Long Leads         | Short Leads |
| 27.5  | G15       | 32        | 18   | 9  | 340                | 340         |
|       | G18       | 32        | 20   | 11 | 280                | 280         |
|       | G21       | 32        | 22   | 13 | 230                | 230         |
|       | G25       | 32        | 24   | 14 | 220                | 220         |
|       | G26       | 32        | 28   | 14 | 220                | 220         |
|       | G27       | 32        | 24.5 | 15 | 200                | 200         |
|       | G33       | 32        | 28   | 18 | 170                | 170         |
|       | G34       | 32        | 33   | 18 | 170                | 170         |
|       | G40       | 32        | 37   | 22 | 140                | 140         |
| 37.5  | K14       | 42        | 30   | 16 | 133                | 133         |
|       | K21       | 42        | 32   | 19 | 112                | 112         |
|       | K27       | 42        | 37   | 22 | 98                 | 98          |
|       | K32       | 42        | 44   | 24 | 91                 | 91          |
|       | K39       | 42        | 43   | 28 | 77                 | 77          |
|       | K42       | 42        | 45   | 30 | 70                 | 70          |
|       | K47       | 42        | 50   | 35 | 63                 | 63          |
| 52.5  | M16       | 57.5      | 45   | 30 | 50                 | 50          |
|       | M20       | 57.5      | 50   | 35 | 45                 | 45          |
|       | M32       | 57.5      | 55   | 45 | 35                 | 35          |
|       | M34       | 57.5      | 65   | 45 | 35                 | 35          |
|       | M47       | 57.5      | 57.5 | 38 | 40                 | 40          |

## Overview

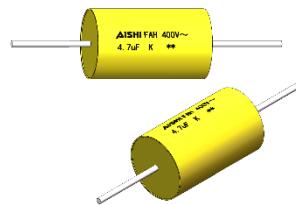
The FAH capacitor is constructed of metallized polypropylene film encapsulated with polyester tape wrapping filled with epoxy resin and tinned copper wire.

## Applications

Widely used in Clamping, AC and Harmonic Filtering and UPS Systems. Suitable for harsh environmental conditions.

## Features

- High ripple current
- Self-healing and low loss
- Optimized AC voltage performance
- Suitable for high frequency applications



## Qualification

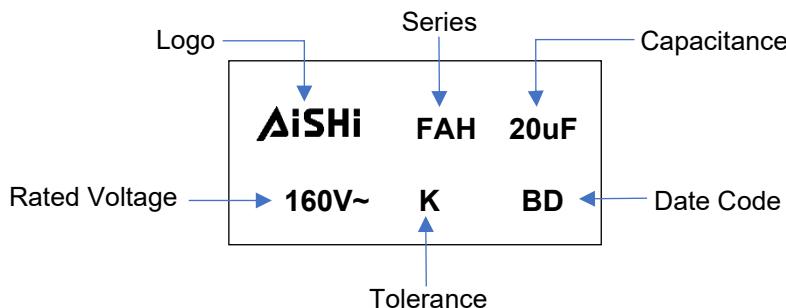
|                    |                      |
|--------------------|----------------------|
| Reference Standard | IEC 61071            |
| Climate Category   | 40/85/56 IEC 60068-1 |



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 160Vac ~ 450Vac  |
| Capacitance Range           | 0.15uF ~40uF   |
| Capacitance Tolerance       | ±5% or ±10% at +25°C   |
| Operating Temperature Range | -40°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.35% per °C for Urms)               |
| Climatic Category           | 40/85/56 IEC 60068-1   |
| Dissipation Factor          | ≤ 0.002 (0.20%) at 1 KHz. C≤20uF at +25°C<br>≤ 0.003 (0.30%) at 1 KHz. C>20uF at +25°C |
| Insulation Resistance       | RC between leads, IR xC≥30,000 s at 100vdc 1minute at +25°C                            |

## Marking



## Part Number System

| F              | AH   | 16   | K                   | 106   | 048                              | XLL                          | B                               |
|----------------|--|--|---------------------|---|----------------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series   | Voltage (VDC)  | Tolerance           | Capacitance (pF)  | Size Code (L)                    | Terminal Code                | Lead Length Code                |
| F = Film       | AC Filtering, Axial THB Type, Metallized PP Film | 160=16<br>250=25<br>275=27<br>350=35<br>400=40<br>450=45 | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | 34mm=034<br>48mm=048<br>58mm=058 | Refer to Terminal Code Table | Refer to Lead Length Code Table |

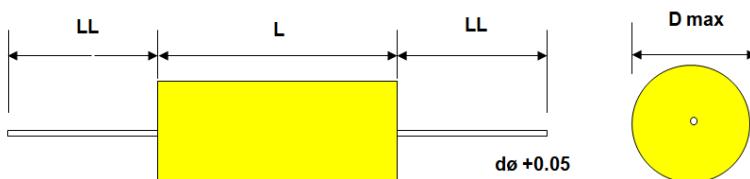
## Terminal Code

| Digit One (Lead/Terminal Type) |   | Digit Two (Lead Space) |   | Digit Three (Lead Ipsilateral) |   |
|--------------------------------|---|------------------------|---|--------------------------------|---|
| Axial Lead                     | X | NA                     | N | NA                             | L |
|                                |   |                        |   |                                |   |
|                                |   |                        |   |                                |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 20.0mm min  | L |
| 35.0mm min  | B |
| NA          | N |

## Dimension (mm)



### Rating and Part Number

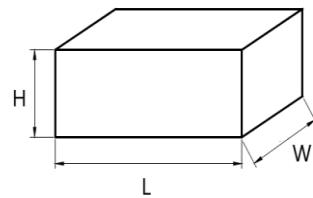
| Vac | Cap Value<br>μF | Dimensions |        | Irms<br>10KHz | Peak Current | ESR 10K<br>Typical | ESL  | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|--------|---------------|--------------|--------------------|------|-------------|-------|-----------|------------------|
|     |                 | D          | L      |               |              |                    |      |             |       |           |                  |
|     |                 | mm max     | mm max | 70°C A        | A            | mΩ                 | nH   | °C/W        | V/us  | mm        |                  |
| 160 | 1.0             | 10.0       | 34.0   | 6.0           | 60.0         | 8.7                | 12.0 | 47.9        | 30    | 0.8       | FAH16K105034XNLB |
| 160 | 2.2             | 11.5       | 34.0   | 6.0           | 66.0         | 14.2               | 20.0 | 29.3        | 30    | 0.8       | FAH16K225034XNLB |
| 160 | 2.5             | 12.0       | 34.0   | 7.0           | 75.0         | 12.7               | 20.0 | 24.1        | 30    | 0.8       | FAH16K255034XNLB |
| 160 | 3.0             | 13.5       | 34.0   | 8.0           | 90.0         | 10.7               | 20.0 | 21.9        | 30    | 1.0       | FAH16K305034XNLB |
| 160 | 3.3             | 14.0       | 34.0   | 9.0           | 99.0         | 9.8                | 20.0 | 18.9        | 30    | 1.0       | FAH16K335034XNLB |
| 160 | 4.0             | 15.5       | 34.0   | 9.0           | 120.0        | 8.3                | 20.0 | 22.3        | 30    | 1.0       | FAH16K405034XNLB |
| 160 | 5.0             | 17.0       | 34.0   | 9.0           | 150.0        | 7.0                | 20.0 | 26.5        | 30    | 1.0       | FAH16K505034XNLB |
| 160 | 6.8             | 19.5       | 34.0   | 9.0           | 204.0        | 5.7                | 20.0 | 32.5        | 30    | 1.0       | FAH16K685034XNLB |
| 160 | 8               | 18.0       | 48.0   | 9.0           | 160.0        | 6.9                | 25.0 | 26.8        | 20    | 1.0       | FAH16K805048XNLB |
| 160 | 10              | 20.0       | 48.0   | 9.0           | 200.0        | 12.4               | 25.0 | 14.9        | 20    | 1.0       | FAH16K106048XNLB |
| 160 | 15              | 24.0       | 48.0   | 12.0          | 300.0        | 5.1                | 25.0 | 20.4        | 20    | 1.2       | FAH16K156048XNLB |
| 160 | 18              | 26.0       | 48.0   | 12.0          | 360.0        | 4.4                | 25.0 | 23.7        | 20    | 1.2       | FAH16K186048XNLB |
| 160 | 20              | 28.0       | 48.0   | 12.0          | 400.0        | 10.7               | 25.0 | 9.7         | 20    | 1.2       | FAH16K206048XNLB |
| 160 | 25              | 31.0       | 48.0   | 12.0          | 500.0        | 4.0                | 25.0 | 26          | 20    | 1.2       | FAH16K256048XNLB |
| 160 | 30              | 29.0       | 58.0   | 12.0          | 450.0        | 5.2                | 30.0 | 20          | 15    | 1.2       | FAH16K306058XNLB |
| 160 | 35              | 33.5       | 58.0   | 12.0          | 525.0        | 4.6                | 30.0 | 22.6        | 15    | 1.2       | FAH16K356058XNLB |
| 160 | 40              | 36.0       | 58.0   | 12.0          | 600.0        | 8.8                | 30.0 | 11.8        | 15    | 1.2       | FAH16K406058XNLB |
| 250 | 0.47            | 9.5        | 34.0   | 6.0           | 28.2         | 14.4               | 15.0 | 28.9        | 45    | 0.8       | FAH25K474034XNLB |
| 250 | 0.68            | 10.0       | 34.0   | 6.0           | 30.6         | 15.2               | 20.0 | 27.4        | 45    | 0.8       | FAH25K684034XNLB |
| 250 | 0.82            | 11.0       | 34.0   | 6.5           | 36.9         | 13.8               | 20.0 | 26.5        | 45    | 0.8       | FAH25K824034XNLB |
| 250 | 1.0             | 12.0       | 34.0   | 7.0           | 45.0         | 10.8               | 20.0 | 28.3        | 45    | 0.8       | FAH25K105034XNLB |
| 250 | 1.5             | 14.5       | 34.0   | 9.0           | 67.5         | 75.0               | 20.0 | 24.7        | 45    | 1.0       | FAH25K155034XNLB |
| 250 | 2.0             | 16.5       | 34.0   | 9.0           | 90.0         | 6.1                | 20.0 | 30.4        | 45    | 1.0       | FAH25K205034XNLB |
| 250 | 2.2             | 17.5       | 34.0   | 9.0           | 99.0         | 5.7                | 20.0 | 32.5        | 45    | 1.0       | FAH25K225034XNLB |
| 250 | 2.5             | 18.5       | 34.0   | 9.0           | 112.5        | 5.2                | 20.0 | 35.6        | 45    | 1.0       | FAH25K255034XNLB |
| 250 | 3.0             | 20.0       | 34.0   | 9.0           | 135.0        | 4.7                | 20.0 | 39.4        | 45    | 1.0       | FAH25K305034XNLB |
| 250 | 3.3             | 18.0       | 48.0   | 9.0           | 99.0         | 6.8                | 25.0 | 27.2        | 30    | 1.0       | FAH25K335048XNLB |
| 250 | 4.0             | 19.5       | 48.0   | 9.0           | 120.0        | 6.0                | 25.0 | 30.9        | 30    | 1.0       | FAH25K405048XNLB |
| 250 | 4.7             | 21.0       | 48.0   | 9.0           | 141.0        | 5.3                | 25.0 | 34.9        | 30    | 1.0       | FAH25K475048XNLB |
| 250 | 5.0             | 21.5       | 48.0   | 9.0           | 150.0        | 5.2                | 25.0 | 35.6        | 30    | 1.0       | FAH25K505048XNLB |
| 250 | 6.8             | 25.0       | 48.0   | 12.0          | 204.0        | 4.2                | 25.0 | 24.8        | 30    | 1.2       | FAH25K685048XNLB |
| 250 | 10              | 30.0       | 48.0   | 12.0          | 300.0        | 3.5                | 25.0 | 29.8        | 30    | 1.2       | FAH25K106048XNLB |
| 250 | 15              | 31.5       | 58.0   | 12.0          | 300.0        | 6.2                | 30.0 | 16.8        | 20    | 1.2       | FAH25K156058XNLB |
| 250 | 20              | 35.0       | 58.0   | 12.0          | 400.0        | 5.2                | 30.0 | 20          | 20    | 1.2       | FAH25K206058XNLB |
| 330 | 0.47            | 11.0       | 34.0   | 6.0           | 28.2         | 17.0               | 20.0 | 24.5        | 60    | 0.8       | FAH33K474034XNLB |
| 330 | 0.68            | 13.0       | 34.0   | 7.0           | 40.8         | 12.2               | 20.0 | 25.1        | 60    | 0.8       | FAH33K684034XNLB |
| 330 | 1.0             | 15.5       | 34.0   | 9.0           | 60.0         | 8.6                | 20.0 | 21.5        | 60    | 1.0       | FAH33K105034XNLB |
| 330 | 2.0             | 18.5       | 48.0   | 9.0           | 80.0         | 8.2                | 25.0 | 22.6        | 40    | 1.0       | FAH33K205048XNLB |
| 330 | 2.2             | 19.5       | 48.0   | 9.0           | 88.0         | 6.8                | 25.0 | 27.2        | 40    | 1.0       | FAH33K225048XNLB |
| 330 | 3.0             | 22.5       | 48.0   | 9.0           | 120.0        | 6.2                | 25.0 | 29.9        | 40    | 1.0       | FAH33K305048XNLB |
| 330 | 3.3             | 23.5       | 48.0   | 12.0          | 132.0        | 5.6                | 25.0 | 18.6        | 40    | 1.2       | FAH33K335048XNLB |
| 330 | 4.0             | 25.5       | 48.0   | 12.0          | 160.0        | 4.9                | 25.0 | 21.3        | 40    | 1.2       | FAH33K405048XNLB |
| 330 | 4.7             | 27.5       | 48.0   | 12.0          | 188.0        | 4.6                | 25.0 | 22.6        | 40    | 1.2       | FAH33K475048XNLB |
| 330 | 5.0             | 28.5       | 48.0   | 12.0          | 200.0        | 4.4                | 25.0 | 23.7        | 40    | 1.2       | FAH33K505048XNLB |
| 330 | 6.8             | 28.5       | 58.0   | 12.0          | 204.0        | 8.8                | 30.0 | 11.8        | 30    | 1.2       | FAH33K685058XNLB |
| 330 | 10              | 34.5       | 58.0   | 12.0          | 300.0        | 6.9                | 30.0 | 15.1        | 30    | 1.2       | FAH33K106058XNLB |
| 400 | 0.47            | 14.5       | 34.0   | 8.0           | 37.6         | 12.4               | 20.0 | 18.9        | 80    | 1.0       | FAH40K474034XNLB |
| 400 | 0.68            | 17.0       | 34.0   | 9.0           | 54.4         | 9.1                | 20.0 | 20.4        | 80    | 1.0       | FAH40K684034XNLB |

## Rating and Part Number

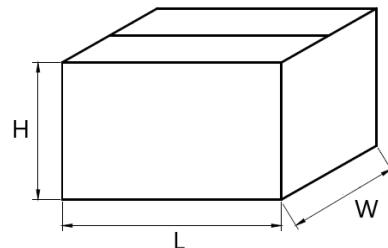
| Vac | Cap Value<br>μF | Dimensions |        | Irms<br>10KHz | Peak Current | ESR 10K<br>Typical | ESL  | Thermal Res | dv/dt | Lead Wire | Part Number      |
|-----|-----------------|------------|--------|---------------|--------------|--------------------|------|-------------|-------|-----------|------------------|
|     |                 | D          | L      |               |              |                    |      |             |       |           |                  |
|     |                 | mm max     | mm max | 70°C A        | A            | mΩ                 | nH   | °C/W        | V/us  | mm        |                  |
| 400 | 1.0             | 20.5       | 34.0   | 9.0           | 80.0         | 6.8                | 20.0 | 27.2        | 80    | 1.0       | FAH40K105034XNLB |
| 400 | 1.5             | 20.5       | 48.0   | 9.0           | 90.0         | 8.3                | 25.0 | 22.3        | 60    | 1.0       | FAH40K155048XNLB |
| 400 | 2.0             | 23.5       | 48.0   | 12.0          | 120.0        | 6.5                | 25.0 | 16          | 60    | 1.2       | FAH40K205048XNLB |
| 400 | 2.2             | 24.5       | 48.0   | 12.0          | 132.0        | 6.1                | 25.0 | 17.1        | 60    | 1.2       | FAH40K225048XNLB |
| 400 | 3.0             | 28.5       | 48.0   | 12.0          | 180.0        | 5.1                | 25.0 | 20.4        | 60    | 1.2       | FAH40K305048XNLB |
| 400 | 3.3             | 30.0       | 48.0   | 12.0          | 198.0        | 4.8                | 25.0 | 21.7        | 60    | 1.2       | FAH40K335048XNLB |
| 400 | 4.0             | 33.0       | 48.0   | 12.0          | 240.0        | 4.6                | 25.0 | 22.6        | 60    | 1.2       | FAH40K405048XNLB |
| 400 | 4.7             | 29.5       | 58.0   | 12.0          | 188.0        | 10.3               | 30.0 | 10.1        | 40    | 1.2       | FAH40K475058XNLB |
| 400 | 5.0             | 30.5       | 58.0   | 12.0          | 200.0        | 9.8                | 30.0 | 10.6        | 40    | 1.2       | FAH40K505058XNLB |
| 400 | 6.8             | 35.0       | 58.0   | 12.0          | 272.0        | 7.9                | 30.0 | 13.2        | 40    | 1.2       | FAH40K685058XNLB |
| 450 | 0.15            | 10.0       | 34.0   | 5.0           | 31.5         | 18.9               | 20.0 | 31.7        | 210   | 0.8       | FAH45K154034XNLB |
| 450 | 0.22            | 12.0       | 34.0   | 7.0           | 46.2         | 13.4               | 20.0 | 22.8        | 210   | 0.8       | FAH45K224034XNLB |
| 450 | 0.33            | 14.5       | 34.0   | 9.0           | 69.3         | 9.2                | 20.0 | 20.1        | 210   | 1.0       | FAH45K334034XNLB |
| 450 | 0.47            | 17.0       | 34.0   | 9.0           | 98.7         | 7.0                | 20.0 | 26.5        | 210   | 1.0       | FAH45K474034XNLB |
| 450 | 0.68            | 20.5       | 34.0   | 9.0           | 142.8        | 5.5                | 20.0 | 33.7        | 210   | 1.0       | FAH45K684034XNLB |
| 450 | 1.0             | 20.5       | 48.0   | 9.0           | 140.0        | 6.1                | 25.0 | 30.4        | 140   | 1.0       | FAH45K105048XNLB |
| 450 | 1.5             | 24.5       | 48.0   | 12.0          | 210.0        | 4.6                | 25.0 | 22.6        | 140   | 1.2       | FAH45K155048XNLB |
| 450 | 2.0             | 28.5       | 48.0   | 12.0          | 280.0        | 4.0                | 25.0 | 26          | 140   | 1.2       | FAH45K205048XNLB |
| 450 | 2.2             | 29.5       | 48.0   | 12.0          | 308.0        | 3.9                | 25.0 | 26.7        | 140   | 1.2       | FAH45K225048XNLB |
| 450 | 2.5             | 31.5       | 48.0   | 12.0          | 350.0        | 3.8                | 25.0 | 27.4        | 140   | 1.2       | FAH45K255048XNLB |
| 450 | 3.0             | 28.0       | 58.0   | 12.0          | 270.0        | 4.7                | 30.0 | 22.2        | 90    | 1.2       | FAH45K305058XNLB |
| 450 | 3.3             | 29.5       | 58.0   | 12.0          | 297.0        | 4.6                | 30.0 | 22.6        | 90    | 1.2       | FAH45K335058XNLB |
| 450 | 4.0             | 32.5       | 58.0   | 12.0          | 360.0        | 4.2                | 30.0 | 24.8        | 90    | 1.2       | FAH45K405058XNLB |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 8                                   | 425    | 185   | 105    |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 3                                   | 445    | 400   | 250    |



## Overview

The FAC series capacitors are designed for PFC system and AC harmonic filtering, consist of metallized polypropylene film, enclosed in cylindrical Al can filled with soft resin, screw terminals or fast-on terminals.

## Applications

Widely used in AC Filtering and LCL System



## Features

- Self-healing property
- Overpressure disconnector device, 10K AFC
- High capacitance density
- High reliability
- Oil type with good thermal dissipation

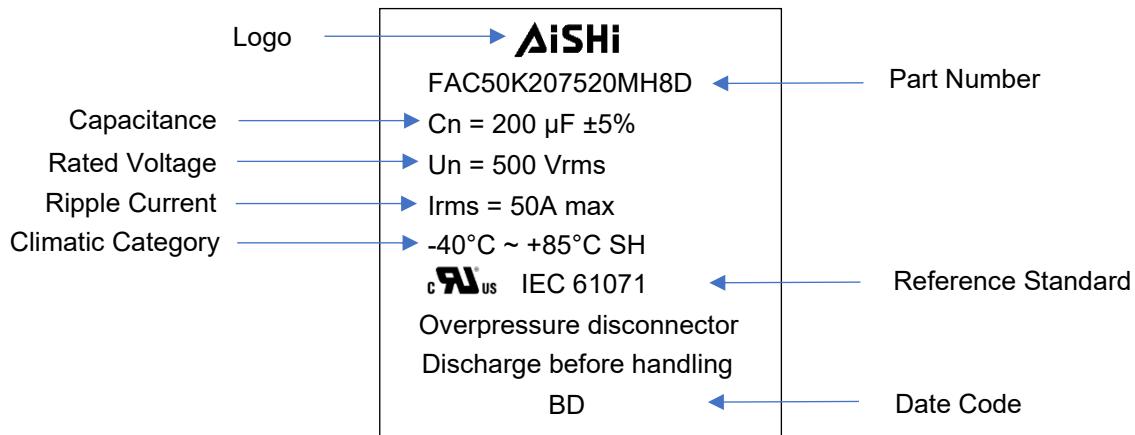
## Applicable Standard

| Approval | Specification | File Number |
|----------|---------------|-------------|
|          | Components    | E500536     |

## General Technical Data

|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film             |
| Voltage Range               | 250Vac ~ 850Vac                           |
| Capacitance Range           | 10uF ~ 600uF                              |
| Capacitance Tolerance       | ±5% or ±10% at +25°C                      |
| Operating Temperature Range | -40°C ~ +85°C                             |
| Climatic Category           | 40/85/56 IEC 60068-1                      |
| Dissipation Factor          | ≤0.0020 at 100Hz                          |
| Insulation Resistance       | IR x C ≥5,000s at 100VDC 1minute at +25°C |

## Marking



## Part Number System

| <b>F</b>       | <b>AC</b>   | <b>50</b>  | <b>K</b>  | <b>207</b>  | <b>525</b>               | <b>MH8</b>                   | <b>D</b>                        |
|----------------|---|--|---|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series  | Voltage (VAC)  | Tolerance   | Capacitance (pF)  | Size Code                | Terminal Code                | Bottom Stud Code                |
| F = Film       | AC Filtering, Al Can Single Phase, Metallized PP Film | 250=25<br>330=33<br>450=45<br>480=48<br>550=55<br>600=60<br>660=66<br>690=69<br>850=85 | J = ±5%<br>K = ±10%<br>H = ±3%<br>A = -5% ~ +10%<br>B = 0 ~ +5%<br>C = -15% ~ 0<br>D = 0 ~ +10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Bottom Stud Code Table |

## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Terminal Space) |   | Digit Three<br>(Terminal Size) |   |
|-----------------------------------|---|-------------------------------|---|--------------------------------|---|
| Male Terminals                    | M | 20mm                          | V | M5                             | 5 |
| Female Terminals                  | F | 30mm                          | H | M6                             | 6 |
| Fast on                           | P | 32mm                          | P | M8                             | 8 |
| Fast on + stud                    | Q | 50mm                          | R | M10                            | H |
|                                   |   |                               |   | Fast On 2+2                    | E |
|                                   |   |                               |   | Fast On 4+4                    | F |

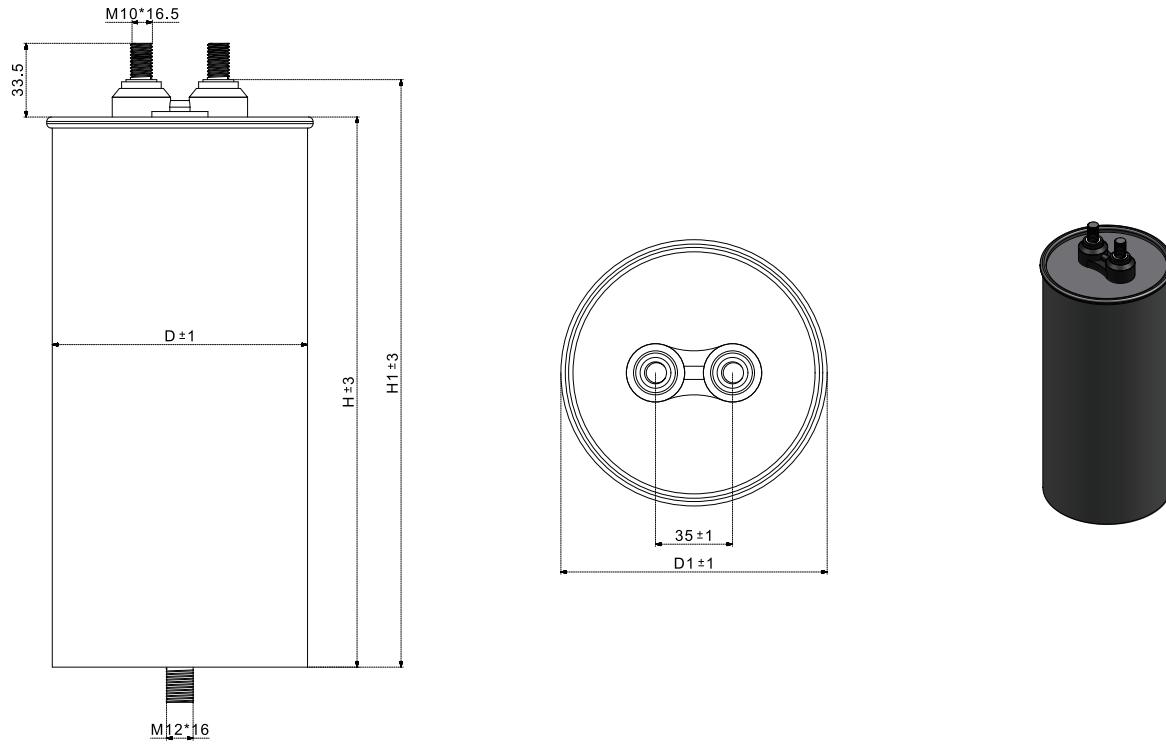
## Bottom Stud Code

| Bottom Stud           |   |
|-----------------------|---|
| Bottom M8*10          | C |
| Bottom M12*16         | D |
| No Bottom Stud        | E |
| Bottom M12*12 D style | B |
| Bottom M10*16         | F |
|                       |   |

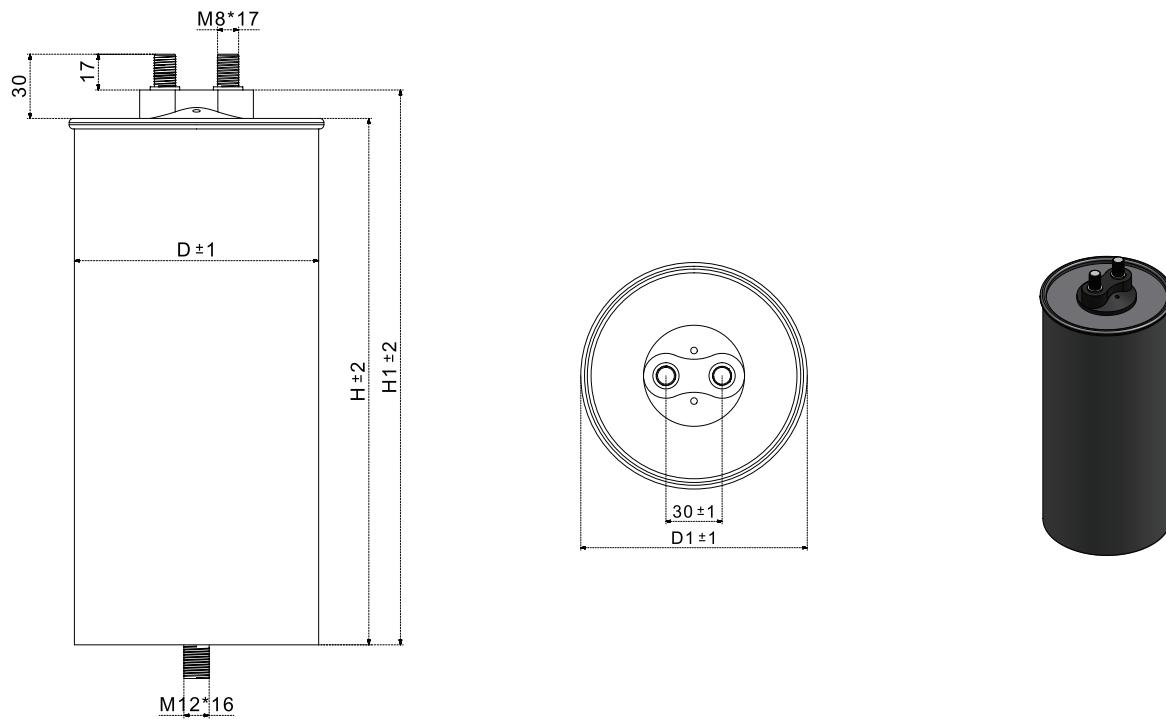
# Metalized Polypropylene AC Filter Film Capacitors

## FAC Series - 250 ~ 850VAC (Cylindrical Aluminum Can, Single Phase)

Diameter: 116mm



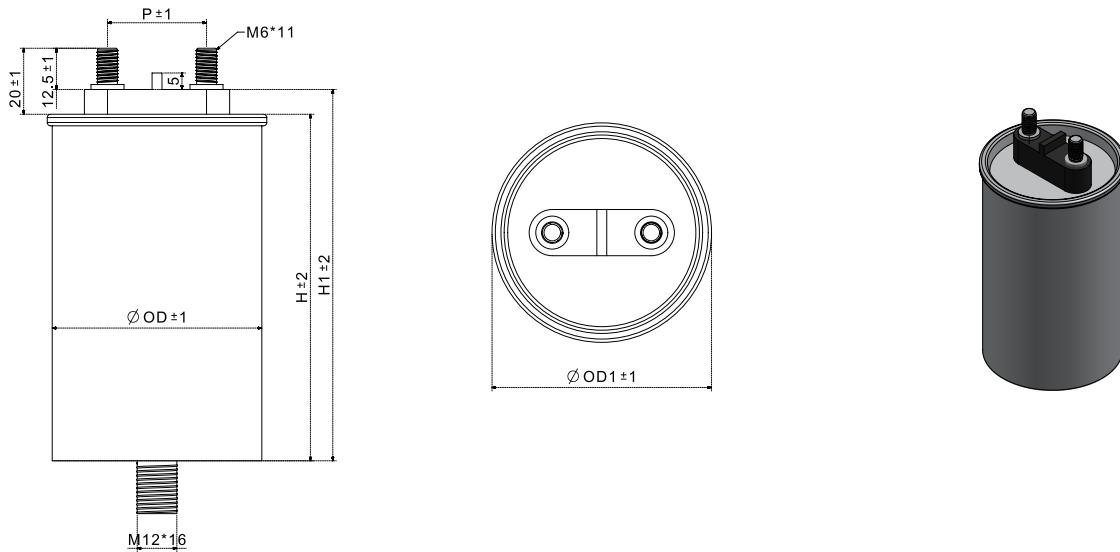
Diameter: 76mm, 86mm, 96mm, 106mm, 116mm, 136mm



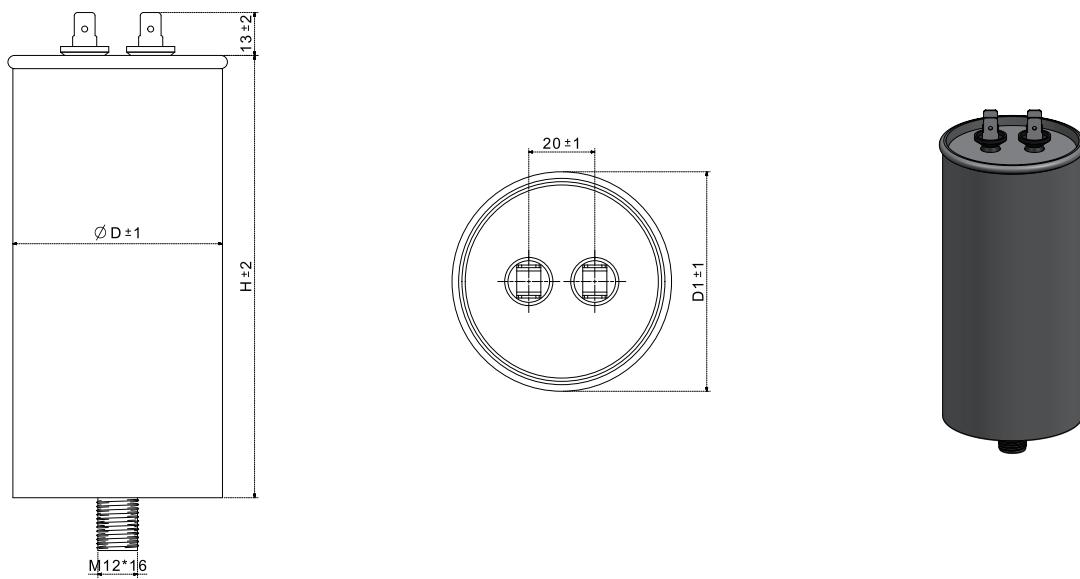
**Metallized Polypropylene AC Filter Film Capacitors**  
**FAC Series** - 250 ~ 850VAC (Cylindrical Aluminum Can, Single Phase)

**AiSHi**  
THINK AHEAD.

Diameter: 60mm, 63.5mm



Diameter: 40mm, 45mm, 50mm, 55mm, 60mm, 63.5mm



### Dimension (mm)

| Case Code | D ± 1mm |        | D1 ± 1mm |        | H ± 2mm |        | P ± 1mm |        |
|-----------|---------|--------|----------|--------|---------|--------|---------|--------|
|           | mm      | inch   | mm       | inch   | mm      | inch   | mm      | inch   |
| U10       | 50.0    | (1.97) | 53.0     | (2.09) | 100.0   | (3.94) | 20.0    | (0.79) |
| U12       | 50.0    | (1.97) | 53.0     | (2.09) | 125.0   | (4.92) | 20.0    | (0.79) |
| U75       | 50.0    | (1.97) | 53.0     | (2.09) | 75.0    | (2.95) | 20.0    | (0.79) |
| V12       | 55.0    | (2.17) | 58.0     | (2.28) | 125.0   | (4.92) | 20.0    | (0.79) |
| W10       | 60.0    | (2.36) | 63.0     | (2.48) | 100.0   | (3.94) | 20.0    | (0.79) |
| W12       | 60.0    | (2.36) | 63.0     | (2.48) | 125.0   | (4.92) | 20.0    | (0.79) |
| 112       | 63.5    | (2.50) | 66.5     | (2.62) | 125.0   | (4.92) | 20.0    | (0.79) |
| 212       | 65.0    | (2.56) | 68.0     | (2.68) | 125.0   | (4.92) | 20.0    | (0.79) |
| 310       | 76.0    | (2.99) | 79.0     | (3.11) | 100.0   | (3.94) | 20.0    | (0.79) |
| 312       | 76.0    | (2.99) | 79.0     | (3.11) | 125.0   | (4.92) | 20.0    | (0.79) |
| 315       | 76.0    | (2.99) | 79.0     | (3.11) | 150.0   | (5.91) | 30.0    | (1.18) |
| 317       | 76.0    | (2.99) | 79.0     | (3.11) | 170.0   | (6.69) | 30.0    | (1.18) |
| 320       | 76.0    | (2.99) | 79.0     | (3.11) | 200.0   | (7.87) | 30.0    | (1.18) |
| 325       | 76.0    | (2.99) | 79.0     | (3.11) | 250.0   | (9.84) | 30.0    | (1.18) |
| 515       | 86.0    | (3.39) | 90.0     | (3.54) | 150.0   | (5.91) | 30.0    | (1.18) |
| 517       | 86.0    | (3.39) | 90.0     | (3.54) | 170.0   | (6.69) | 30.0    | (1.18) |
| 520       | 86.0    | (3.39) | 90.0     | (3.54) | 200.0   | (7.87) | 30.0    | (1.18) |
| 525       | 86.0    | (3.39) | 90.0     | (3.54) | 250.0   | (9.84) | 30.0    | (1.18) |
| 625       | 96.0    | (3.78) | 100.0    | (3.94) | 250.0   | (9.84) | 30.0    | (1.18) |
| 725       | 106.0   | (4.17) | 111.0    | (4.37) | 250.0   | (9.84) | 30.0    | (1.18) |
| 925       | 116.0   | (4.57) | 121.0    | (4.76) | 250.0   | (9.84) | 35.0    | (1.38) |

### Rating and Part Number

| Vac | Cap Value<br>μF | OD±1 |        | H±2   |        | Irms max<br>at 50°C | Peak Current | ESR<br>1KHz | ESL | Thermal Res | dv/dt | Pkg Qty | Part Number      |
|-----|-----------------|------|--------|-------|--------|---------------------|--------------|-------------|-----|-------------|-------|---------|------------------|
|     |                 | mm   | inch   | mm    | inch   |                     |              |             |     |             |       |         |                  |
| 250 | 60              | 50.0 | (1.97) | 100.0 | (3.94) | 16.0                | 1002         | 3.9         | 175 | 7.8         | 16.7  | 15      | FAC25K606U10QVEC |
| 250 | 80              | 50.0 | (1.97) | 100.0 | (3.94) | 16.0                | 1336         | 4.4         | 175 | 7.8         | 16.7  | 15      | FAC25K806U10QVEC |
| 250 | 100             | 50.0 | (1.97) | 125.0 | (4.92) | 16.0                | 1260         | 4.8         | 175 | 6.3         | 12.6  | 15      | FAC25K107U12QVEC |
| 250 | 120             | 55.0 | (2.17) | 125.0 | (4.92) | 16.0                | 1512         | 4.6         | 175 | 6.0         | 12.6  | 15      | FAC25K127V12QVEC |
| 250 | 150             | 60.0 | (2.36) | 125.0 | (4.92) | 16.0                | 1890         | 4.3         | 175 | 5.3         | 12.6  | 12      | FAC25K157W12QVEC |
| 250 | 150             | 76.0 | (2.99) | 125.0 | (4.92) | 22.0                | 1620         | 3.3         | 190 | 4.7         | 10.8  | 12      | FAC25K157312MH8D |
| 250 | 200             | 76.0 | (2.99) | 125.0 | (4.92) | 30.0                | 2340         | 3.0         | 200 | 4.7         | 11.7  | 12      | FAC25K207312MH8D |
| 250 | 250             | 76.0 | (2.99) | 150.0 | (5.91) | 30.0                | 2150         | 3.4         | 190 | 4.3         | 8.6   | 12      | FAC25K257315MH8D |
| 250 | 300             | 86.0 | (3.39) | 150.0 | (5.91) | 36.0                | 2580         | 3.2         | 190 | 4.3         | 8.6   | 8       | FAC25K307515MH8D |
| 250 | 350             | 76.0 | (2.99) | 200.0 | (7.87) | 35.0                | 3640         | 3.1         | 200 | 4.0         | 10.4  | 12      | FAC25K307320MH8D |
| 250 | 400             | 86.0 | (3.39) | 200.0 | (7.87) | 40.0                | 4160         | 3.0         | 200 | 4.0         | 10.4  | 8       | FAC25K407520MH8D |
| 250 | 500             | 86.0 | (3.39) | 200.0 | (7.87) | 50.0                | 5400         | 3.3         | 220 | 2.9         | 10.8  | 8       | FAC25K507520MH8D |
| 250 | 600             | 86.0 | (3.39) | 250.0 | (9.84) | 50.0                | 4800         | 3.1         | 200 | 2.5         | 8.0   | 8       | FAC25K607525MH8D |
| 330 | 50              | 50.0 | (1.97) | 100.0 | (3.94) | 16.0                | 835          | 5.1         | 175 | 7.8         | 16.7  | 15      | FAC33K506U10QVEC |
| 330 | 60              | 50.0 | (1.97) | 125.0 | (4.92) | 16.0                | 756          | 5.4         | 175 | 6.3         | 12.6  | 15      | FAC33K606U12QVEC |
| 330 | 100             | 60.0 | (2.36) | 125.0 | (4.92) | 16.0                | 1260         | 4.1         | 175 | 5.3         | 12.6  | 12      | FAC33K107W12QVEC |
| 330 | 100             | 76.0 | (2.99) | 125.0 | (4.92) | 30.0                | 1310         | 3.8         | 190 | 5.2         | 13.1  | 12      | FAC33K107312MH8D |
| 330 | 120             | 63.5 | (2.50) | 125.0 | (4.92) | 16.0                | 864          | 3.8         | 175 | 5.5         | 7.2   | 12      | FAC33K127112QVEC |
| 330 | 150             | 76.0 | (2.99) | 150.0 | (5.91) | 40.0                | 1350         | 3.0         | 190 | 4.3         | 9.0   | 12      | FAC33K157315MH8D |
| 330 | 200             | 86.0 | (3.39) | 150.0 | (5.91) | 40.0                | 2620         | 3.1         | 200 | 4.0         | 13.1  | 8       | FAC33K207515MH8D |
| 330 | 250             | 76.0 | (2.99) | 200.0 | (7.87) | 40.0                | 2150         | 3.9         | 190 | 4.0         | 8.6   | 12      | FAC33K257320MH8D |
| 330 | 300             | 86.0 | (3.39) | 200.0 | (7.87) | 50.0                | 3930         | 3.6         | 200 | 2.9         | 13.1  | 8       | FAC33K307520MH8D |
| 330 | 350             | 86.0 | (3.39) | 200.0 | (7.87) | 50.0                | 4585         | 3.4         | 200 | 2.9         | 13.1  | 8       | FAC33K357520MH8D |
| 330 | 400             | 86.0 | (3.39) | 250.0 | (9.84) | 50.0                | 3240         | 3.6         | 200 | 2.5         | 8.1   | 8       | FAC33K407525MH8D |
| 450 | 20              | 50.0 | (1.97) | 75.0  | (2.95) | 16.0                | 700          | 5.2         | 175 | 10.5        | 35.0  | 15      | FAC45K206U75QVEC |
| 450 | 30              | 50.0 | (1.97) | 100.0 | (3.94) | 16.0                | 699          | 6.9         | 175 | 7.8         | 23.3  | 15      | FAC45K306U10QVEC |
| 450 | 40              | 50.0 | (1.97) | 100.0 | (3.94) | 16.0                | 540          | 5.7         | 175 | 7.8         | 13.5  | 15      | FAC45K406U10QVEC |
| 450 | 50              | 50.0 | (1.97) | 125.0 | (4.92) | 16.0                | 540          | 5.0         | 175 | 5.3         | 10.8  | 15      | FAC45K506U12QVEC |
| 450 | 50              | 76.0 | (2.99) | 100.0 | (3.94) | 20.0                | 855          | 3.3         | 190 | 5.3         | 17.1  | 12      | FAC45K506310MH8D |
| 450 | 70              | 60.0 | (2.36) | 125.0 | (4.92) | 16.0                | 910          | 4.8         | 175 | 5.5         | 13.0  | 12      | FAC45K706W12QVEC |
| 450 | 80              | 60.0 | (2.36) | 125.0 | (4.92) | 16.0                | 904          | 4.4         | 175 | 5.5         | 11.3  | 12      | FAC45K806W12QVEC |
| 450 | 100             | 76.0 | (2.99) | 150.0 | (5.91) | 35.0                | 1080         | 4.7         | 190 | 4.3         | 10.8  | 12      | FAC45K107315MH8D |
| 450 | 150             | 86.0 | (3.39) | 150.0 | (5.91) | 40.0                | 1965         | 3.9         | 200 | 4.3         | 13.1  | 8       | FAC45K157515MH8D |
| 450 | 200             | 86.0 | (3.39) | 200.0 | (7.87) | 40.0                | 2700         | 3.7         | 220 | 2.9         | 13.5  | 8       | FAC45K207520MH8D |
| 450 | 250             | 86.0 | (3.39) | 200.0 | (7.87) | 50.0                | 2025         | 3.8         | 200 | 2.9         | 8.1   | 8       | FAC45K257520MH8D |
| 450 | 300             | 86.0 | (3.39) | 250.0 | (9.84) | 50.0                | 2400         | 4.1         | 220 | 2.5         | 8.0   | 8       | FAC45K307525MH8D |
| 480 | 20              | 50.0 | (1.97) | 75.0  | (2.95) | 16.0                | 750          | 4.8         | 175 | 10.5        | 37.5  | 15      | FAC48K206U75QVEC |
| 480 | 25              | 50.0 | (1.97) | 100.0 | (3.94) | 16.0                | 750          | 4.2         | 175 | 7.8         | 30.0  | 15      | FAC48K256U10QVEC |
| 480 | 30              | 50.0 | (1.97) | 100.0 | (3.94) | 16.0                | 750          | 3.9         | 175 | 7.8         | 25.0  | 15      | FAC48K306U10QVEC |
| 480 | 40              | 60.0 | (2.36) | 100.0 | (3.94) | 12.0                | 852          | 5.2         | 175 | 7.3         | 21.3  | 12      | FAC48K406W10QVEC |
| 480 | 50              | 55.0 | (2.17) | 125.0 | (4.92) | 14.0                | 850          | 4.6         | 175 | 6.0         | 17.0  | 15      | FAC48K506V12QVEC |
| 480 | 60              | 76.0 | (2.99) | 125.0 | (4.92) | 18.0                | 1056         | 3.7         | 190 | 4.7         | 17.6  | 12      | FAC48K606312MH8D |
| 480 | 70              | 76.0 | (2.99) | 125.0 | (4.92) | 20.0                | 1050         | 3.4         | 190 | 4.7         | 15.0  | 12      | FAC48K706312MH8D |
| 480 | 80              | 76.0 | (2.99) | 150.0 | (5.91) | 30.0                | 1224         | 4.2         | 190 | 4.3         | 15.3  | 12      | FAC48K806315MH8D |
| 480 | 100             | 76.0 | (2.99) | 200.0 | (7.87) | 50.0                | 1710         | 4.1         | 190 | 4.0         | 17.1  | 12      | FAC48K107320MH8D |
| 480 | 150             | 76.0 | (2.99) | 200.0 | (7.87) | 40.0                | 2565         | 3.5         | 200 | 4.0         | 17.1  | 12      | FAC48K157320MH8D |
| 480 | 200             | 76.0 | (2.99) | 250.0 | (9.84) | 40.0                | 2620         | 4.6         | 200 | 3.0         | 13.1  | 12      | FAC48K207325MH8D |
| 480 | 250             | 86.0 | (3.39) | 250.0 | (9.84) | 50.0                | 2925         | 4.2         | 200 | 2.5         | 11.7  | 8       | FAC48K257525MH8D |

**Metallized Polypropylene AC Filter Film Capacitors**  
**FAC Series - 250 ~ 850VAC (Cylindrical Aluminum Can, Single Phase)**



**Rating and Part Number**

| Vac | Cap Value<br>μF | OD±1  |        | H±2   |        | Irms max<br>at 50°C | Peak Current | ESR<br>1KHz | ESL | Thermal Res | dv/dt | Pkg Qty | Part Number      |
|-----|-----------------|-------|--------|-------|--------|---------------------|--------------|-------------|-----|-------------|-------|---------|------------------|
|     |                 | mm    | inch   | mm    | inch   |                     |              |             |     |             |       |         |                  |
| 550 | 20              | 50.0  | (1.97) | 100.0 | (3.94) | 16.0                | 600          | 6.9         | 175 | 7.9         | 30.0  | 15      | FAC55K206U10QVEC |
| 550 | 30              | 50.0  | (1.97) | 125.0 | (4.92) | 16.0                | 750          | 6.6         | 175 | 6.3         | 25.0  | 15      | FAC55K306U12QVEC |
| 550 | 40              | 60.0  | (2.36) | 125.0 | (4.92) | 16.0                | 752          | 7.1         | 175 | 5.5         | 18.8  | 15      | FAC55K406W12QVEC |
| 550 | 50              | 63.5  | (2.50) | 125.0 | (4.92) | 16.0                | 850          | 6.1         | 175 | 5.3         | 17.0  | 12      | FAC55K506112QVEC |
| 550 | 70              | 76.0  | (2.99) | 150.0 | (5.91) | 25.0                | 903          | 4.6         | 175 | 4.2         | 12.9  | 12      | FAC55K706315MH8D |
| 550 | 80              | 76.0  | (2.99) | 150.0 | (5.91) | 25.0                | 1800         | 4.3         | 190 | 4.3         | 22.5  | 12      | FAC55K806315MH8D |
| 550 | 100             | 86.0  | (3.39) | 150.0 | (5.91) | 30.0                | 2820         | 3.9         | 200 | 4.0         | 28.2  | 8       | FAC55K107515MH8D |
| 550 | 125             | 86.0  | (3.39) | 200.0 | (7.87) | 30.0                | 2825         | 3.6         | 200 | 2.9         | 22.6  | 8       | FAC55K127520MH8D |
| 550 | 150             | 86.0  | (3.39) | 200.0 | (7.87) | 40.0                | 3210         | 5.0         | 200 | 2.9         | 21.4  | 8       | FAC55K157520MH8D |
| 550 | 200             | 86.0  | (3.39) | 250.0 | (9.84) | 50.0                | 3220         | 4.4         | 200 | 2.5         | 16.1  | 8       | FAC55K207525MH8D |
| 550 | 250             | 96.0  | (3.78) | 250.0 | (9.84) | 50.0                | 3500         | 4.0         | 240 | 2.1         | 14.0  | 6       | FAC55K257625MH8D |
| 550 | 300             | 106.0 | (4.17) | 250.0 | (9.84) | 50.0                | 3510         | 3.7         | 240 | 2.0         | 11.7  | 5       | FAC55K307725MH8D |
| 600 | 10              | 50.0  | (1.97) | 75.0  | (2.95) | 16.0                | 350          | 6.4         | 160 | 10.5        | 35.0  | 15      | FAC60K106U75QVEC |
| 600 | 20              | 50.0  | (1.97) | 125.0 | (4.92) | 16.0                | 500          | 11.1        | 160 | 6.3         | 25.0  | 15      | FAC60K206U12QVEC |
| 600 | 25              | 50.0  | (1.97) | 125.0 | (4.92) | 16.0                | 600          | 6.1         | 175 | 6.3         | 24.0  | 15      | FAC60K256U12QVEC |
| 600 | 30              | 60.0  | (2.36) | 125.0 | (4.92) | 16.0                | 600          | 5.4         | 175 | 5.3         | 20.0  | 12      | FAC60K306W12QVEC |
| 600 | 35              | 60.0  | (2.36) | 125.0 | (4.92) | 16.0                | 700          | 7.3         | 175 | 5.3         | 20.0  | 12      | FAC60K356W12QVEC |
| 600 | 40              | 63.5  | (2.50) | 125.0 | (4.92) | 16.0                | 700          | 6.6         | 175 | 5.3         | 17.5  | 12      | FAC60K406112QVEC |
| 600 | 45              | 65.0  | (2.56) | 125.0 | (4.92) | 16.0                | 702          | 6.1         | 175 | 5.3         | 15.6  | 12      | FAC60K456212QVEC |
| 600 | 50              | 76.0  | (2.99) | 150.0 | (5.91) | 20.0                | 850          | 5.7         | 175 | 4.3         | 17.0  | 12      | FAC60K506315MH8D |
| 660 | 10              | 50.0  | (1.97) | 125.0 | (4.92) | 16.0                | 550          | 5.2         | 160 | 10.5        | 55.0  | 15      | FAC66K106U12QVEC |
| 660 | 15              | 60.0  | (2.36) | 125.0 | (4.92) | 16.0                | 420          | 6.2         | 160 | 6.3         | 28.0  | 12      | FAC66K156W12QVEC |
| 660 | 20              | 55.0  | (2.17) | 125.0 | (4.92) | 16.0                | 550          | 8.3         | 175 | 6.3         | 27.5  | 12      | FAC66K206V12QVEC |
| 660 | 25              | 60.0  | (2.36) | 125.0 | (4.92) | 16.0                | 550          | 7.9         | 175 | 5.3         | 22.0  | 12      | FAC66K256W12QVEC |
| 660 | 30              | 63.5  | (2.50) | 125.0 | (4.92) | 16.0                | 750          | 6.3         | 175 | 5.5         | 25.0  | 12      | FAC66K306112QVEC |
| 660 | 40              | 76.0  | (2.99) | 150.0 | (5.91) | 30.0                | 900          | 5.2         | 175 | 4.6         | 22.5  | 12      | FAC66K406315MH8D |
| 660 | 50              | 86.0  | (3.39) | 150.0 | (5.91) | 40.0                | 1000         | 4.7         | 175 | 4.0         | 20.0  | 8       | FAC66K506515MH8D |
| 690 | 10              | 50.0  | (1.97) | 125.0 | (4.92) | 16.0                | 550          | 5.2         | 160 | 6.3         | 55.0  | 15      | FAC69K106U12QVEC |
| 690 | 15              | 50.0  | (1.97) | 125.0 | (4.92) | 16.0                | 420          | 6.2         | 160 | 6.3         | 28.0  | 15      | FAC69K156W12QVEC |
| 690 | 20              | 55.0  | (2.17) | 125.0 | (4.92) | 16.0                | 550          | 8.3         | 175 | 6.0         | 27.5  | 15      | FAC69K206V12QVEC |
| 690 | 30              | 63.5  | (2.50) | 125.0 | (4.92) | 16.0                | 750          | 6.3         | 175 | 5.5         | 25.0  | 12      | FAC69K306112QVEC |
| 690 | 40              | 76.0  | (2.99) | 150.0 | (5.91) | 25.0                | 1152         | 4.8         | 190 | 4.3         | 28.8  | 12      | FAC69K406315MH8D |
| 690 | 50              | 86.0  | (3.39) | 150.0 | (5.91) | 30.0                | 1150         | 4.3         | 190 | 4.0         | 23.0  | 8       | FAC69K506515MH8D |
| 690 | 70              | 76.0  | (2.99) | 250.0 | (9.84) | 30.0                | 1260         | 3.7         | 200 | 2.9         | 18.0  | 12      | FAC69K706325MH8D |
| 690 | 85              | 86.0  | (3.39) | 250.0 | (9.84) | 40.0                | 1530         | 3.5         | 220 | 2.5         | 18.0  | 8       | FAC69K856525MH8D |
| 690 | 100             | 86.0  | (3.39) | 250.0 | (9.84) | 40.0                | 1800         | 3.3         | 200 | 2.5         | 18.0  | 8       | FAC69K107525MH8D |
| 690 | 125             | 106.0 | (4.17) | 250.0 | (9.84) | 50.0                | 1563         | 4.0         | 220 | 2.0         | 12.5  | 5       | FAC69K127725MH8D |
| 690 | 150             | 106.0 | (4.17) | 250.0 | (9.84) | 50.0                | 1875         | 3.8         | 240 | 2.0         | 12.5  | 5       | FAC69K157725MH8D |
| 690 | 200             | 116.0 | (4.57) | 250.0 | (9.84) | 60.0                | 3300         | 1.6         | 190 | 2.0         | 16.5  | 5       | FAC69K207925MXHD |
| 850 | 10              | 76.0  | (2.99) | 100.0 | (3.94) | 22.0                | 600          | 2.7         | 100 | 8.8         | 60.0  | 12      | FAC85K106310MH8D |
| 850 | 13              | 76.0  | (2.99) | 100.0 | (3.94) | 26.0                | 650          | 2.7         | 120 | 8.8         | 50.0  | 12      | FAC85K136310MH8D |
| 850 | 22              | 76.0  | (2.99) | 150.0 | (5.91) | 25.0                | 500          | 4.4         | 190 | 6.3         | 22.7  | 12      | FAC85K226315MH8D |
| 850 | 33              | 76.0  | (2.99) | 170.0 | (6.69) | 40.0                | 1500         | 1.9         | 120 | 5.0         | 45.5  | 12      | FAC85K336317MH8D |
| 850 | 44              | 86.0  | (3.39) | 170.0 | (6.69) | 43.0                | 1700         | 2.1         | 140 | 4.2         | 38.6  | 8       | FAC85K446517MH8D |
| 850 | 68              | 86.0  | (3.39) | 250.0 | (9.84) | 49.0                | 1400         | 2.0         | 190 | 3.4         | 20.6  | 8       | FAC85K686525MH8D |
| 850 | 80              | 86.0  | (3.39) | 250.0 | (9.84) | 50.0                | 1700         | 1.8         | 190 | 3.4         | 21.3  | 8       | FAC85K806525MH8D |
| 850 | 100             | 96.0  | (3.78) | 250.0 | (9.84) | 56.0                | 2100         | 1.8         | 190 | 3.0         | 21.0  | 6       | FAC85K107625MH8D |
| 850 | 150             | 116.0 | (4.57) | 250.0 | (9.84) | 60.0                | 2900         | 1.6         | 190 | 2.6         | 19.3  | 5       | FAC85K157925MXHD |

## Packaging Information

Capacitors are well protected by foams. And then are packaged in the cartons.

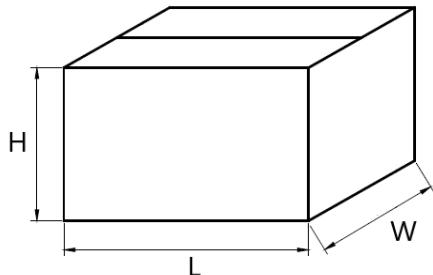


Table 1 carton dimensions

| Carton No. | L (mm) | W (mm) | H (mm) |
|------------|--------|--------|--------|
| 1          | 375    | 285    | 235    |
| 2          | 375    | 285    | 300    |
| 3          | 375    | 285    | 330    |
| 4          | 375    | 285    | 365    |
| 5          | 375    | 285    | 265    |

According to the capacitor's diameter, every carton contains capacitors as per the following Table 2.

Table 2 Capacitor quantity of each carton

| Capacitor Diameter (mm) | Quantity (pcs) |
|-------------------------|----------------|
| 50                      | 15             |
| 55                      | 15             |
| 60                      | 12             |
| 63.5                    | 12             |
| 65                      | 12             |
| 76                      | 12             |
| 86                      | 8              |
| 96                      | 6              |
| 106                     | 5              |
| 116                     | 5              |
| 136                     | 2              |

## Overview

The FAD series capacitors are designed for PFC system or filtering harmonics at the AC output of large inverter system. The FAD series capacitor consists of metallized polypropylene film, enclosed in cylindrical Al case and filled with soft PU resin.

## Applications

Widely used in PFC, AC Filtering and LCL System

## Features

- Double safety protection
  - Self-healing property
  - Overpressure disconnector device
- 3 phases in one case, delta connection
- High reliability
- Oil type with good thermal dissipation



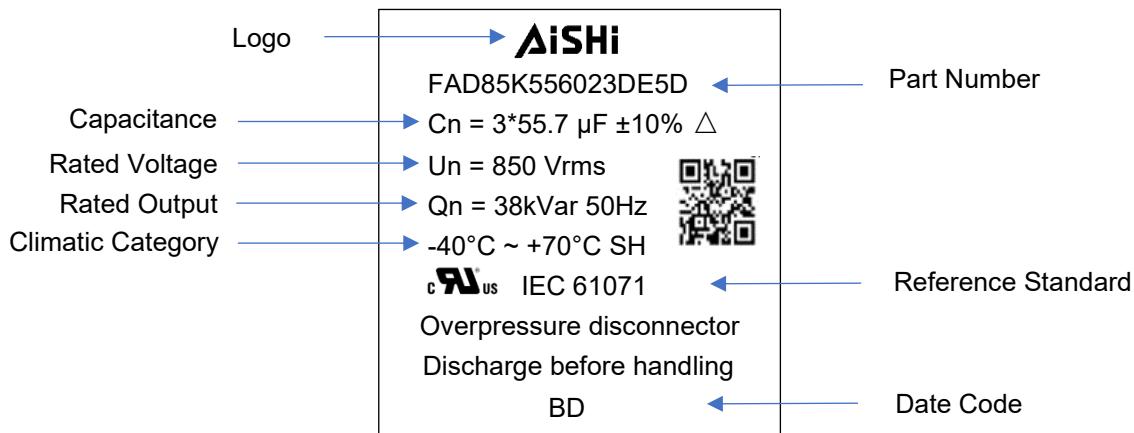
## Applicable Standard

| Approval | Specification | File Number |
|----------|---------------|-------------|
|          | Components    | E500536     |

## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film                          |
| Voltage Range               | 230Vac ~ 850Vac  |
| Capacitance Range           | 3*8uF ~ 3*335uF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C                                   |
| Operating Temperature Range | -40°C ~ +85°C  |
| Climatic Category           | 40/85/56 IEC 60068-1                                   |
| Dissipation Factor          | ≤0.0020 at 100Hz                                       |
| Insulation Resistance       | R <sub>is</sub> x C ≥5,000s at 100VDC 1minute at +25°C |

## Marking



## Part Number System

| F              | AD   | 85   | J   | 556   | 023                      | DF6                          | D                               |
|----------------|--|--|---|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series   | Voltage (VAC)  | Tolerance   | Capacitance (pF)  | Size Code                | Terminal Code                | Bottom Stud Code                |
| F = Film       | AC Filtering,<br>Al Can<br>Three Phase,<br>Metallized<br>PP Film | 230 = 23<br>400 = 40<br>440 = 44<br>480 = 48<br>525 = 52<br>660 = 66<br>690 = 69<br>760 = 76<br>850 = 85 | J = ±5%<br>K = ±10%<br>H = ±3%<br>A = -5% ~ +10%<br>B = 0 ~ +5%<br>C = -15% ~ 0<br>D = 0 ~ +10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Dimension Table | Refer to Terminal Code Table | Refer to Bottom Stud Code Table |

## Terminal Code

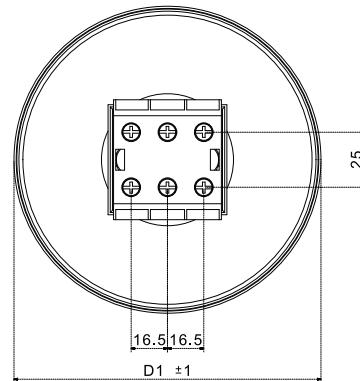
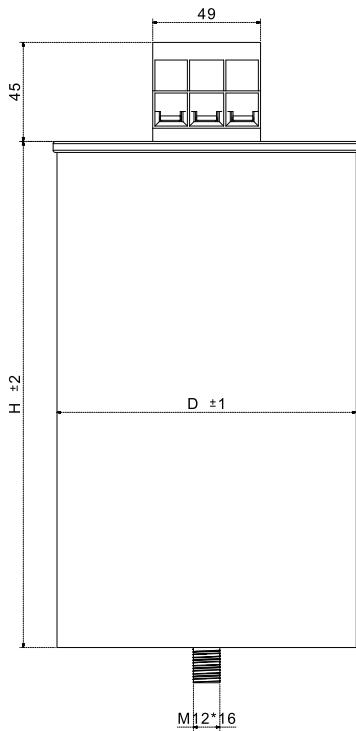
| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Terminal Space) |   | Digit Three<br>(Terminal Size) |   |
|-----------------------------------|---|-------------------------------|---|--------------------------------|---|
| Three Phase Screw                 | D | 15                            | E | M5                             | 5 |
|                                   |   | 16.5                          | F | M6                             | 6 |
|                                   |   | 35                            | X | M8                             | 8 |

## Bottom Stud Code

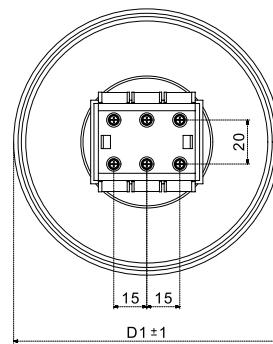
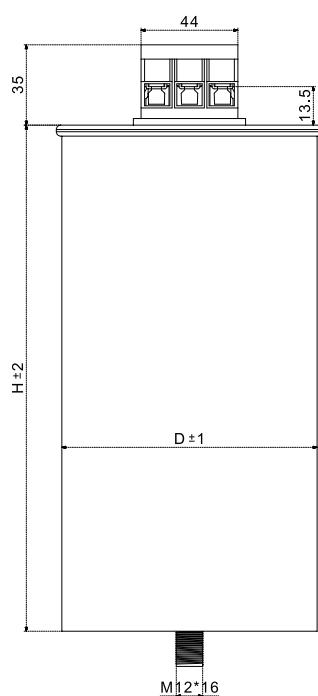
| Bottom Stud    |   |
|----------------|---|
| Bottom M12*16  | D |
| No Bottom Stud | E |

**Metallized Polypropylene Film AC Film Capacitors  
FAD Series - 230 ~ 850VAC (Cylindrical Aluminum Can, Three Phase)**

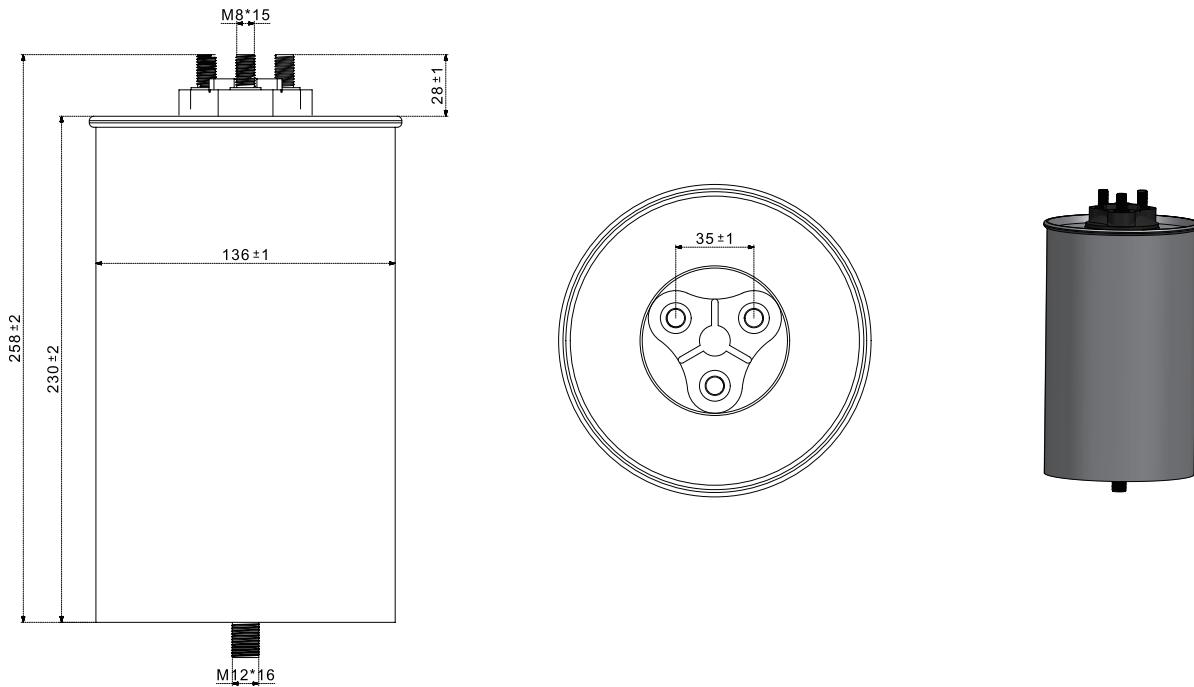
Diameter: 136mm



Diameter: 76mm, 86mm, 96mm, 106mm, 116mm, 136mm



Diameter: 136mm



### Dimension (mm)

| Case<br>Code | D ± 1mm |        | D1 ± 1mm |        | H ± 2mm |         |
|--------------|---------|--------|----------|--------|---------|---------|
|              | mm      | inch   | mm       | inch   | mm      | inch    |
| 316          | 76      | (2.99) | 80       | (3.15) | 164     | (6.46)  |
| 516          | 86      | (3.39) | 90       | (3.54) | 160     | (6.30)  |
| 520          | 86      | (3.39) | 90       | (3.54) | 200     | (7.87)  |
| 523          | 86      | (3.39) | 90       | (3.54) | 230     | (9.06)  |
| 527          | 86      | (3.39) | 90       | (3.54) | 275     | (10.83) |
| 535          | 86      | (3.39) | 90       | (3.54) | 350     | (13.78) |
| 623          | 96      | (3.78) | 101      | (3.98) | 230     | (9.06)  |
| 916          | 116     | (4.57) | 121      | (4.76) | 160     | (6.30)  |
| 920          | 116     | (4.57) | 121      | (4.76) | 200     | (7.87)  |
| 923          | 116     | (4.57) | 121      | (4.76) | 230     | (9.06)  |
| 927          | 116     | (4.57) | 121      | (4.76) | 275     | (10.83) |
| 020          | 136     | (5.35) | 142      | (5.59) | 200     | (7.87)  |
| 023          | 136     | (5.35) | 142      | (5.59) | 230     | (9.06)  |

**Metallized Polypropylene Film AC Film Capacitors**  
**FAD Series - 230 ~ 850VAC (Cylindrical Aluminum Can, Three Phase)**



**Rating and Part Number**

| Vac | Cap Value $\mu\text{F}$ | OD±1 |        | H±2 |         | Output Kvar @50Hz | Irms at 40°C | Surge Current | dv/dt (Max) | Pkg Qty | Part Number      |
|-----|-------------------------|------|--------|-----|---------|-------------------|--------------|---------------|-------------|---------|------------------|
|     |                         | mm   | inch   | mm  | inch    |                   |              |               |             |         |                  |
| 230 | 3 x 200.6               | 86   | (3.39) | 275 | (10.83) | 10.0              | 25.1         | 5021          | 25          | 8       | FAD23K207527DE5D |
| 230 | 3 x 200.6               | 116  | (4.57) | 160 | (6.30)  | 10.0              | 25.1         | 5021          | 25          | 5       | FAD23K207916DE5D |
| 230 | 3 x 250.7               | 86   | (3.39) | 275 | (10.83) | 12.5              | 31.4         | 6276          | 25          | 8       | FAD23K257527DE5D |
| 230 | 3 x 250.7               | 116  | (4.57) | 200 | (7.87)  | 12.5              | 31.4         | 6276          | 25          | 5       | FAD23K257920DE5D |
| 230 | 3 x 300.9               | 86   | (3.39) | 350 | (13.78) | 15.0              | 37.7         | 7531          | 25          | 8       | FAD23K307535DE5D |
| 230 | 3 x 300.9               | 116  | (4.57) | 200 | (7.87)  | 15.0              | 37.7         | 7531          | 25          | 5       | FAD23K307920DE5D |
| 230 | 3 x 335.0               | 116  | (4.57) | 230 | (9.06)  | 16.7              | 41.9         | 8384          | 25          | 5       | FAD23K337923DE5D |
| 400 | 3 x 66.3                | 86   | (3.39) | 200 | (7.87)  | 10.0              | 14.4         | 2887          | 44          | 8       | FAD40K666520DE5D |
| 400 | 3 x 82.9                | 86   | (3.39) | 200 | (7.87)  | 12.5              | 18.0         | 3609          | 44          | 8       | FAD40K836520DE5D |
| 400 | 3 x 99.5                | 86   | (3.39) | 275 | (10.83) | 15.0              | 21.7         | 4330          | 44          | 8       | FAD40K107527DE5D |
| 400 | 3x110.7                 | 86   | (3.39) | 275 | (10.83) | 16.7              | 24.1         | 4821          | 44          | 8       | FAD40K117527DE5D |
| 400 | 3x110.7                 | 116  | (4.57) | 160 | (6.30)  | 16.7              | 24.1         | 4821          | 44          | 5       | FAD40K117916DE5D |
| 400 | 3x132.6                 | 86   | (3.39) | 275 | (10.83) | 20.0              | 28.9         | 5774          | 44          | 8       | FAD40K137527DE5D |
| 400 | 3x132.6                 | 116  | (4.57) | 200 | (7.87)  | 20.0              | 28.9         | 5774          | 44          | 5       | FAD40K137920DE5D |
| 400 | 3x165.8                 | 86   | (3.39) | 350 | (13.78) | 25.0              | 36.1         | 7217          | 44          | 8       | FAD40K167535DE5D |
| 400 | 3x165.8                 | 116  | (4.57) | 200 | (7.87)  | 25.0              | 36.1         | 7217          | 44          | 5       | FAD40K167920DE5D |
| 400 | 3x198.9                 | 136  | (5.35) | 200 | (7.87)  | 30.0              | 43.3         | 8661          | 44          | 2       | FAD40K207020DE5D |
| 440 | 3x46                    | 86   | (3.39) | 160 | (6.30)  | 8.3               | 10.9         | 2178          | 48          | 8       | FAD44K466516DE5D |
| 440 | 3 x 68.5                | 86   | (3.39) | 200 | (7.87)  | 12.5              | 16.4         | 3280          | 48          | 8       | FAD44K696520DE5D |
| 440 | 3 x 82.2                | 86   | (3.39) | 200 | (7.87)  | 15.0              | 19.7         | 3937          | 48          | 8       | FAD44K836520DE5D |
| 440 | 3x109.0                 | 86   | (3.39) | 275 | (10.83) | 20.0              | 26.2         | 5249          | 48          | 8       | FAD44K117527DE5D |
| 440 | 3x109.0                 | 116  | (4.57) | 160 | (6.30)  | 20.0              | 26.2         | 5249          | 48          | 5       | FAD44K117916DE5D |
| 440 | 3x123.3                 | 86   | (3.39) | 275 | (10.83) | 22.5              | 29.5         | 5905          | 48          | 8       | FAD44K127527DE5D |
| 440 | 3x123.3                 | 116  | (4.57) | 200 | (7.87)  | 22.5              | 29.5         | 5905          | 48          | 5       | FAD44K127920DE5D |
| 440 | 3x137.0                 | 116  | (4.57) | 200 | (7.87)  | 25.0              | 32.8         | 6561          | 48          | 5       | FAD44K147920DE5D |
| 440 | 3x156                   | 116  | (4.57) | 200 | (7.87)  | 28.1              | 36.9         | 7375          | 48          | 5       | FAD44K157920DE5D |
| 440 | 3x164.4                 | 86   | (3.39) | 350 | (13.78) | 30.0              | 39.4         | 7873          | 48          | 8       | FAD44K167535DE5D |
| 440 | 3x164.4                 | 116  | (4.57) | 200 | (7.87)  | 30.0              | 39.4         | 7873          | 48          | 5       | FAD44K167920DE5D |
| 480 | 3x40                    | 86   | (3.39) | 200 | (7.87)  | 8.7               | 10.5         | 2093          | 52          | 8       | FAD48K406520DE5D |
| 480 | 3x60                    | 86   | (3.39) | 275 | (10.83) | 13.0              | 15.6         | 3127          | 52          | 8       | FAD48K606527DE5D |
| 480 | 3x80                    | 116  | (4.57) | 200 | (7.87)  | 17.4              | 20.9         | 4186          | 52          | 5       | FAD48K806920DE5D |
| 480 | 3x120                   | 116  | (4.57) | 275 | (10.83) | 26.0              | 31.3         | 6255          | 52          | 5       | FAD48K127927DE5D |
| 525 | 3 x 38.5                | 86   | (3.39) | 200 | (7.87)  | 10.0              | 11.0         | 2199          | 57          | 8       | FAD52K396520DE5D |
| 525 | 3x48.1                  | 86   | (3.39) | 200 | (7.87)  | 12.5              | 13.7         | 2749          | 57          | 8       | FAD52K486520DE5D |
| 525 | 3x58                    | 86   | (3.39) | 230 | (9.06)  | 15.0              | 16.5         | 3299          | 57          | 8       | FAD52K586523DE5D |
| 525 | 3 x 77.0                | 86   | (3.39) | 275 | (10.83) | 20.0              | 22.0         | 4399          | 57          | 8       | FAD52K776527DE5D |
| 525 | 3*96                    | 86   | (3.39) | 350 | (13.78) | 25.0              | 27.5         | 5499          | 57          | 8       | FAD52K966535DE5D |
| 525 | 3*96                    | 116  | (4.57) | 200 | (7.87)  | 25.0              | 27.5         | 5499          | 57          | 5       | FAD52K966920DE5D |
| 525 | 3*115.4                 | 136  | (5.35) | 200 | (7.87)  | 30.0              | 33.0         | 6598          | 57          | 2       | FAD52K117020DE5D |
| 660 | 3 x 20.3                | 86   | (3.39) | 200 | (7.87)  | 8.3               | 7.3          | 1457          | 72          | 8       | FAD66K206520DE5D |
| 660 | 3 x 24.4                | 86   | (3.39) | 200 | (7.87)  | 10.0              | 8.7          | 1750          | 72          | 8       | FAD66K256520DE5D |
| 660 | 3 x 30.4                | 86   | (3.39) | 230 | (9.06)  | 12.5              | 10.9         | 2187          | 72          | 8       | FAD66K306523DE5D |
| 660 | 3 x 36.5                | 96   | (3.78) | 230 | (9.06)  | 15.0              | 13.1         | 2624          | 72          | 6       | FAD66K366623DE5D |
| 660 | 3 x 48.7                | 86   | (3.39) | 350 | (13.78) | 20.0              | 17.5         | 3499          | 72          | 8       | FAD66K496535DE5D |
| 690 | 3 x 27.9                | 86   | (3.39) | 230 | (9.06)  | 12.5              | 10.5         | 2092          | 75          | 8       | FAD69K286523DE5D |
| 690 | 3 x 33.4                | 96   | (3.78) | 230 | (9.06)  | 15.0              | 12.6         | 2510          | 75          | 6       | FAD69K336623DE5D |
| 690 | 3 x 44.6                | 86   | (3.39) | 350 | (13.78) | 20.0              | 16.7         | 3347          | 75          | 8       | FAD69K456535DE5D |
| 690 | 3 x 55.7                | 86   | (3.39) | 350 | (13.78) | 25.0              | 20.9         | 4184          | 75          | 8       | FAD69K566535DE5D |

### Rating and Part Number

| Vac | Cap Value $\mu\text{F}$ | OD±1 |        | H±2 |        | Output Kvar @50Hz | Irms at 40°C | Surge Current | dv/dt (Max) | Pkg Qty | Part Number      |
|-----|-------------------------|------|--------|-----|--------|-------------------|--------------|---------------|-------------|---------|------------------|
|     |                         | mm   | inch   | mm  | inch   |                   |              |               |             |         |                  |
| 850 | 3X8                     | 76   | (2.99) | 164 | (6.46) | 5.4               | 20.0         | 960           | 120         | 12      | FAD85K805316DE5D |
| 850 | 3X16                    | 86   | (3.39) | 200 | (7.87) | 10.9              | 25.0         | 1920          | 120         | 8       | FAD85K166520DE5D |
| 850 | 3X25                    | 96   | (3.78) | 230 | (9.06) | 17.0              | 40.0         | 2500          | 100         | 6       | FAD85K256623DE5D |
| 850 | 3X37.5                  | 116  | (4.57) | 230 | (9.06) | 25.5              | 45.0         | 3800          | 100         | 5       | FAD85K376923DE5D |
| 850 | 3X41.5                  | 116  | (4.57) | 230 | (9.06) | 28.2              | 50.0         | 4200          | 100         | 5       | FAD85K416923DE5D |
| 850 | 3X49                    | 136  | (5.35) | 230 | (9.06) | 33.3              | 50.0         | 4900          | 100         | 2       | FAD85K496023DE5D |
| 850 | 3X55.8                  | 136  | (5.35) | 230 | (9.06) | 37.9              | 50.0         | 5600          | 100         | 2       | FAD85K556023DE5D |

## Packaging Information

Capacitors are well protected by foams. And then are packaged in the cartons.

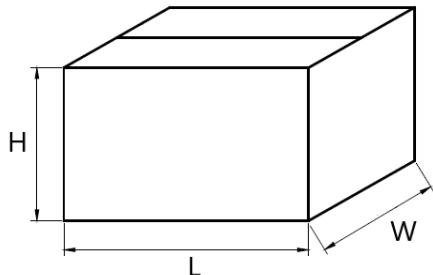


Table 1 carton dimensions

| Carton No. | L (mm) | W (mm) | H (mm) |
|------------|--------|--------|--------|
| 1          | 375    | 285    | 235    |
| 2          | 375    | 285    | 300    |
| 3          | 375    | 285    | 330    |
| 4          | 375    | 285    | 365    |
| 5          | 375    | 285    | 265    |

According to the capacitor's diameter, every carton contains capacitors as per the following Table 2.

Table 2 Capacitor quantity of each carton

| Capacitor Diameter (mm) | Quantity (pcs) |
|-------------------------|----------------|
| 76                      | 12             |
| 86                      | 8              |
| 96                      | 6              |
| 116                     | 5              |
| 136                     | 2              |

## Overview

The FSA capacitor is constructed of metallized polypropylene film with double-sided metallized film encapsulated with epoxy resin in a plastic box, with tinned copper wires.

## Features

- High ripple current
- Self-healing property
- Low losses
- Small inherent temperature rise
- High contact reliability

## Applications

Widely used in high voltage, high frequency circuit, snubber and SCR commutating circuits.



## Qualification

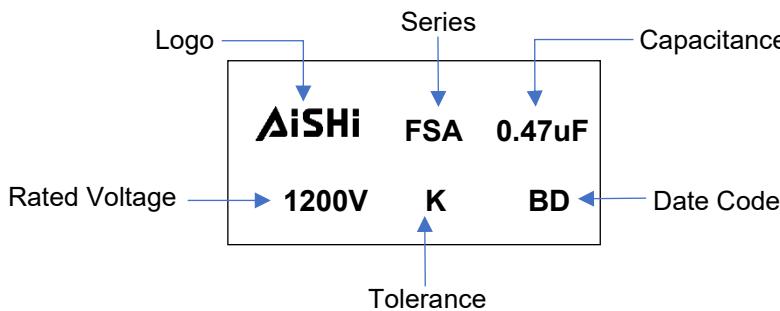
|                    |                      |
|--------------------|----------------------|
| Reference Standard | IEC 61071            |
| Climate Category   | 40/85/56 IEC 60068-1 |



## General Technical Data

|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film   |
| Voltage Range               | 630Vdc to 2000Vdc   |
| Capacitance Range           | 0.001µF to 4.7µF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C  |
| Operating Temperature Range | -55°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)   |
| Climatic Category           | 55/105/56 IEC 60068-1   |
| Dissipation Factor          | 0.0010 (0.1%) at 25°C, 1KHz   |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 100 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 30 000 s |

## Marking



## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Part Number System

| F              | SA   | 3B   | K                   | 474   | G40                      | 2GL                          | 5                               |
|----------------|--|--|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series   | Voltage (VDC)                                      | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | Snubber Capacitor, Double-sided Metallized PP Film | 630=2L<br>1000=3K<br>1200=3B<br>1600=3W<br>2000=3D | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

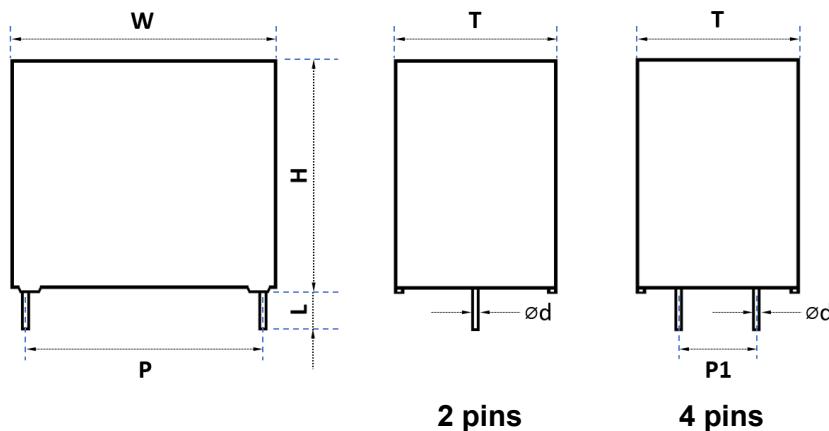
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 27.5mm                    | G | 10.2mm                            | B |
| 2 leads for straight cut          | 2 | 37.5mm                    | K | 12.7mm                            | G |
| 2 leads for forming cut           | E | 57.5mm                    | M | 20.3mm                            | D |
| 4 leads for straight cut          | 4 |                           |   | N/A                               | L |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| 20.0mm min  | L |

**Dimension (mm)**



**Size Code Table (mm)**

| Size Code | Dimension |           |      |           |     |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|-----|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T   | Tolerance | P     | Tolerance | Ød        | Tolerance |
| C13       | 13        | 0.5       | 11   | 0.5       | 5   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C16       | 13        | 0.5       | 12   | 0.5       | 6   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C24       | 13        | 0.5       | 13   | 0.5       | 7   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| E14       | 18        | 0.5       | 11   | 0.5       | 5   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E17       | 18        | 0.5       | 12   | 0.5       | 6   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E29       | 18        | 0.5       | 13.5 | 0.5       | 7.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E34       | 18        | 0.5       | 14.5 | 0.5       | 8.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E43       | 18        | 0.5       | 16   | 0.5       | 10  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E47       | 18        | 0.5       | 19   | 0.5       | 11  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| F14       | 26        | 0.5       | 15.5 | 0.5       | 6   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F17       | 26        | 0.5       | 16.5 | 0.5       | 7   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F20       | 26        | 0.5       | 17   | 0.5       | 8.5 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F24       | 26        | 0.5       | 19   | 0.5       | 10  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F26       | 26        | 0.5       | 20   | 0.5       | 11  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F27       | 26        | 0.5       | 22   | 0.5       | 12  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| G14       | 32        | 0.8       | 17   | 0.8       | 8   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G15       | 32        | 0.8       | 18   | 0.8       | 9   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G22       | 32        | 0.8       | 24.5 | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22  | 0.8       | 27.5  | 0.5       | 1.0       | 0.05      |
| K11       | 42        | 1.0       | 24   | 1.0       | 13  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K17       | 42        | 1.0       | 28   | 1.0       | 17  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K24       | 42        | 1.0       | 40   | 1.0       | 20  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K32       | 42        | 1.0       | 44   | 1.0       | 24  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K42       | 42        | 1.0       | 45   | 1.0       | 30  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K47       | 42        | 1.0       | 50   | 1.0       | 35  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K85       | 42        | 1.0       | 22   | 1.0       | 11  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K86       | 42        | 1.0       | 28.5 | 1.0       | 16  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |

# Double Metallized Polypropylene Film Snubber Capacitors

## FSA Series - 630 ~ 2000VDC



### Rating and Part Number

| Vdc | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|     |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|     |     | μF        | mm         | mm   | mm  | mm   | 70°C A         | A            | mΩ                               | nH   | V/us  | mm        |                  |
| 630 | 400 | 0.0039    | 13         | 11   | 5   | 10   | 1.0            | 15.6         | 160.0                            | 10.0 | 4000  | 0.6       | FSA2LK392C132CL5 |
| 630 | 400 | 0.0047    | 13         | 11   | 5   | 10   | 1.2            | 18.8         | 135.0                            | 10.0 | 4000  | 0.6       | FSA2LK472C132CL5 |
| 630 | 400 | 0.0056    | 13         | 11   | 5   | 10   | 1.3            | 22.4         | 110.0                            | 10.0 | 4000  | 0.6       | FSA2LK562C132CL5 |
| 630 | 400 | 0.0068    | 13         | 11   | 5   | 10   | 1.4            | 27.2         | 93.0                             | 10.0 | 4000  | 0.6       | FSA2LK682C132CL5 |
| 630 | 400 | 0.0082    | 13         | 11   | 5   | 10   | 1.5            | 32.8         | 80.0                             | 10.0 | 4000  | 0.6       | FSA2LK822C132CL5 |
| 630 | 400 | 0.01      | 13         | 11   | 5   | 10   | 1.8            | 40.0         | 65.0                             | 10.0 | 4000  | 0.6       | FSA2LK103C132CL5 |
| 630 | 400 | 0.012     | 13         | 11   | 5   | 10   | 2.0            | 48.0         | 55.0                             | 10.0 | 4000  | 0.6       | FSA2LK123C132CL5 |
| 630 | 400 | 0.015     | 13         | 12   | 6   | 10   | 2.4            | 60.0         | 45.0                             | 10.0 | 4000  | 0.6       | FSA2LK153C162CL5 |
| 630 | 400 | 0.018     | 13         | 12   | 6   | 10   | 2.6            | 72.0         | 35.0                             | 10.0 | 4000  | 0.6       | FSA2LK183C162CL5 |
| 630 | 400 | 0.02      | 13         | 13   | 7   | 10   | 2.7            | 80.0         | 32.0                             | 10.0 | 4000  | 0.6       | FSA2LK203C242CL5 |
| 630 | 400 | 0.022     | 13         | 13   | 7   | 10   | 2.8            | 88.0         | 30.0                             | 10.0 | 4000  | 0.6       | FSA2LK223C242CL5 |
| 630 | 400 | 0.01      | 18         | 11   | 5   | 15   | 1.8            | 30.0         | 62.0                             | 12.0 | 3000  | 0.8       | FSA2LK103E142EL5 |
| 630 | 400 | 0.012     | 18         | 11   | 5   | 15   | 2.2            | 36.0         | 52.0                             | 12.0 | 3000  | 0.8       | FSA2LK123E142EL5 |
| 630 | 400 | 0.015     | 18         | 11   | 5   | 15   | 2.5            | 45.0         | 42.0                             | 12.0 | 3000  | 0.8       | FSA2LK153E142EL5 |
| 630 | 400 | 0.018     | 18         | 11   | 5   | 15   | 2.7            | 54.0         | 35.0                             | 12.0 | 3000  | 0.8       | FSA2LK183E142EL5 |
| 630 | 400 | 0.02      | 18         | 11   | 5   | 15   | 2.8            | 60.0         | 32.0                             | 12.0 | 3000  | 0.8       | FSA2LK203E142EL5 |
| 630 | 400 | 0.022     | 18         | 11   | 5   | 15   | 2.9            | 66.0         | 30.0                             | 12.0 | 3000  | 0.8       | FSA2LK223E142EL5 |
| 630 | 400 | 0.027     | 18         | 12   | 6   | 15   | 3.2            | 81.0         | 25.0                             | 12.0 | 3000  | 0.8       | FSA2LK273E172EL5 |
| 630 | 400 | 0.033     | 18         | 12   | 6   | 15   | 3.7            | 99.0         | 20.0                             | 12.0 | 3000  | 0.8       | FSA2LK333E172EL5 |
| 630 | 400 | 0.039     | 18         | 12   | 6   | 15   | 3.9            | 117.0        | 16.0                             | 12.0 | 3000  | 0.8       | FSA2LK393E172EL5 |
| 630 | 400 | 0.047     | 18         | 13.5 | 7.5 | 15   | 4.5            | 141.0        | 15.0                             | 12.0 | 3000  | 0.8       | FSA2LK473E292EL5 |
| 630 | 400 | 0.056     | 18         | 13.5 | 7.5 | 15   | 4.6            | 168.0        | 14.0                             | 12.0 | 3000  | 0.8       | FSA2LK563E292EL5 |
| 630 | 400 | 0.068     | 18         | 14.5 | 8.5 | 15   | 4.7            | 204.0        | 13.5                             | 12.0 | 3000  | 0.8       | FSA2LK683E342EL5 |
| 630 | 400 | 0.082     | 18         | 16   | 10  | 15   | 4.8            | 246.0        | 13.2                             | 12.0 | 3000  | 0.8       | FSA2LK823E432EL5 |
| 630 | 400 | 0.1       | 18         | 16   | 10  | 15   | 5.0            | 300.0        | 13.0                             | 12.0 | 3000  | 0.8       | FSA2LK104E432EL5 |
| 630 | 400 | 0.12      | 18         | 19   | 11  | 15   | 5.4            | 360.0        | 12.5                             | 12.0 | 3000  | 0.8       | FSA2LK124E472EL5 |
| 630 | 400 | 0.047     | 26         | 15.5 | 6   | 22.5 | 3.8            | 70.5         | 20.0                             | 15.0 | 1500  | 0.8       | FSA2LK473F142FL5 |
| 630 | 400 | 0.056     | 26         | 15.5 | 6   | 22.5 | 4.0            | 84.0         | 19.5                             | 15.0 | 1500  | 0.8       | FSA2LK563F142FL5 |
| 630 | 400 | 0.068     | 26         | 15.5 | 6   | 22.5 | 4.2            | 102.0        | 19.0                             | 15.0 | 1500  | 0.8       | FSA2LK683F142FL5 |
| 630 | 400 | 0.082     | 26         | 15.5 | 6   | 22.5 | 4.5            | 123.0        | 18.0                             | 15.0 | 1500  | 0.8       | FSA2LK823F142FL5 |
| 630 | 400 | 0.1       | 26         | 15.5 | 6   | 22.5 | 5.0            | 150.0        | 16.0                             | 15.0 | 1500  | 0.8       | FSA2LK104F142FL5 |
| 630 | 400 | 0.12      | 26         | 16.5 | 7   | 22.5 | 5.3            | 180.0        | 14.0                             | 15.0 | 1500  | 0.8       | FSA2LK124F172FL5 |
| 630 | 400 | 0.15      | 26         | 17   | 8.5 | 22.5 | 6.0            | 225.0        | 11.0                             | 15.0 | 1500  | 0.8       | FSA2LK154F202FL5 |
| 630 | 400 | 0.18      | 26         | 17   | 8.5 | 22.5 | 6.5            | 270.0        | 10.0                             | 15.0 | 1500  | 0.8       | FSA2LK184F202FL5 |
| 630 | 400 | 0.22      | 26         | 19   | 10  | 22.5 | 7.5            | 330.0        | 8.5                              | 15.0 | 1500  | 0.8       | FSA2LK224F242FL5 |
| 630 | 400 | 0.27      | 26         | 20   | 11  | 22.5 | 8.5            | 405.0        | 6.5                              | 15.0 | 1500  | 0.8       | FSA2LK274F262FL5 |
| 630 | 400 | 0.33      | 26         | 20   | 11  | 22.5 | 9.0            | 495.0        | 6.0                              | 15.0 | 1500  | 0.8       | FSA2LK334F262FL5 |
| 630 | 400 | 0.39      | 26         | 22   | 12  | 22.5 | 10.0           | 585.0        | 5.0                              | 15.0 | 1500  | 0.8       | FSA2LK394F272FL5 |
| 630 | 400 | 0.15      | 32         | 17   | 8   | 27.5 | 4.6            | 135.0        | 25.0                             | 20.0 | 900   | 0.8       | FSA2LK154G142GL5 |
| 630 | 400 | 0.18      | 32         | 17   | 8   | 27.5 | 4.8            | 162.0        | 22.0                             | 20.0 | 900   | 0.8       | FSA2LK184G142GL5 |
| 630 | 400 | 0.22      | 32         | 18   | 9   | 27.5 | 5.0            | 198.0        | 20.0                             | 20.0 | 900   | 0.8       | FSA2LK224G152GL5 |
| 630 | 400 | 0.27      | 32         | 20   | 11  | 27.5 | 5.5            | 243.0        | 17.5                             | 20.0 | 900   | 0.8       | FSA2LK274G182GL5 |
| 630 | 400 | 0.33      | 32         | 20   | 11  | 27.5 | 5.8            | 297.0        | 16.5                             | 20.0 | 900   | 0.8       | FSA2LK334G182GL5 |
| 630 | 400 | 0.39      | 32         | 20   | 11  | 27.5 | 6.0            | 351.0        | 16.0                             | 20.0 | 900   | 0.8       | FSA2LK394G182GL5 |
| 630 | 400 | 0.47      | 32         | 22   | 13  | 27.5 | 6.5            | 423.0        | 14.0                             | 20.0 | 900   | 0.8       | FSA2LK474G212GL5 |
| 630 | 400 | 0.56      | 32         | 22   | 13  | 27.5 | 7.0            | 504.0        | 12.0                             | 20.0 | 900   | 0.8       | FSA2LK564G212GL5 |
| 630 | 400 | 0.68      | 32         | 24.5 | 13  | 27.5 | 7.5            | 612.0        | 10.5                             | 20.0 | 900   | 0.8       | FSA2LK684G222GL5 |
| 630 | 400 | 0.82      | 32         | 28   | 14  | 27.5 | 8.5            | 738.0        | 9.0                              | 20.0 | 900   | 0.8       | FSA2LK824G262GL5 |
| 630 | 400 | 1         | 32         | 33   | 18  | 27.5 | 10.0           | 900.0        | 7.0                              | 20.0 | 900   | 0.8       | FSA2LK105G342GL5 |
| 630 | 400 | 1.2       | 32         | 33   | 18  | 27.5 | 13.0           | 1080.0       | 6.0                              | 20.0 | 900   | 0.8       | FSA2LK125G342GL5 |
| 630 | 400 | 1.5       | 32         | 37   | 22  | 27.5 | 15.0           | 1350.0       | 5.0                              | 20.0 | 900   | 1.0       | FSA2LK155G402GL5 |
| 630 | 400 | 1.8       | 32         | 37   | 22  | 27.5 | 16.0           | 1620.0       | 4.0                              | 20.0 | 900   | 1.0       | FSA2LK185G402GL5 |
| 630 | 400 | 0.33      | 42         | 22   | 11  | 37.5 | 6.8            | 165.0        | 13.0                             | 25.0 | 500   | 1.0       | FSA2LK334K852KL5 |
| 630 | 400 | 0.47      | 42         | 22   | 11  | 37.5 | 7.0            | 235.0        | 12.5                             | 25.0 | 500   | 1.0       | FSA2LK474K852KL5 |
| 630 | 400 | 0.56      | 42         | 22   | 11  | 37.5 | 7.5            | 280.0        | 11.0                             | 25.0 | 500   | 1.0       | FSA2LK564K852KL5 |
| 630 | 400 | 0.68      | 42         | 22   | 11  | 37.5 | 8.0            | 340.0        | 10.5                             | 25.0 | 500   | 1.0       | FSA2LK684K852KL5 |

### Rating and Part Number

| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|      |     | μF        | mm         | mm   | mm  | mm   | 70°C A         | A            | mΩ                               | nH   | V/us  | mm        |                  |
| 630  | 400 | 0.82      | 42         | 28.5 | 16  | 37.5 | 8.0            | 410.0        | 10.5                             | 25.0 | 500   | 1.0       | FSA2LK824K862KL5 |
| 630  | 400 | 1.0       | 42         | 28.5 | 16  | 37.5 | 8.5            | 500.0        | 10.0                             | 25.0 | 500   | 1.0       | FSA2LK105K862KL5 |
| 630  | 400 | 1.5       | 42         | 28.5 | 16  | 37.5 | 9.5            | 750.0        | 9.0                              | 25.0 | 500   | 1.0       | FSA2LK155K862KL5 |
| 630  | 400 | 1.8       | 42         | 32   | 19  | 37.5 | 10.5           | 900.0        | 8.5                              | 25.0 | 500   | 1.0       | FSA2LK185K212KL5 |
| 630  | 400 | 2.2       | 42         | 40   | 20  | 37.5 | 11.5           | 1100.0       | 8.0                              | 25.0 | 500   | 1.0       | FSA2LK225K242KL5 |
| 630  | 400 | 2.7       | 42         | 40   | 20  | 37.5 | 13.0           | 1350.0       | 7.0                              | 25.0 | 500   | 1.0       | FSA2LK275K242KL5 |
| 630  | 400 | 3.3       | 42         | 44   | 24  | 37.5 | 14.0           | 1650.0       | 6.0                              | 25.0 | 500   | 1.0       | FSA2LK335K322KL5 |
| 630  | 400 | 3.9       | 42         | 45   | 30  | 37.5 | 15.0           | 1950.0       | 5.0                              | 25.0 | 500   | 1.0       | FSA2LK395K422KL5 |
| 630  | 400 | 4.7       | 42         | 50   | 35  | 37.5 | 16.0           | 2350.0       | 4.0                              | 25.0 | 500   | 1.0       | FSA2LK475K472KL5 |
| 1000 | 600 | 0.0039    | 13         | 11   | 5   | 10   | 1.0            | 25.4         | 160.0                            | 10.0 | 6500  | 0.6       | FSA3KK392C132CL5 |
| 1000 | 600 | 0.0047    | 13         | 11   | 5   | 10   | 1.2            | 30.6         | 135.0                            | 10.0 | 6500  | 0.6       | FSA3KK472C132CL5 |
| 1000 | 600 | 0.0056    | 13         | 12   | 6   | 10   | 1.3            | 36.4         | 110.0                            | 10.0 | 6500  | 0.6       | FSA3KK562C162CL5 |
| 1000 | 600 | 0.0068    | 13         | 12   | 6   | 10   | 1.4            | 44.2         | 93.0                             | 10.0 | 6500  | 0.6       | FSA3KK682C162CL5 |
| 1000 | 600 | 0.0082    | 18         | 11   | 5   | 15   | 1.5            | 28.7         | 80.0                             | 10.0 | 3500  | 0.8       | FSA3KK822E142EL5 |
| 1000 | 600 | 0.01      | 18         | 11   | 5   | 15   | 1.8            | 35.0         | 62.0                             | 12.0 | 3500  | 0.8       | FSA3KK103E142EL5 |
| 1000 | 600 | 0.012     | 18         | 11   | 5   | 15   | 2.2            | 42.0         | 52.0                             | 12.0 | 3500  | 0.8       | FSA3KK123E142EL5 |
| 1000 | 600 | 0.015     | 18         | 11   | 5   | 15   | 2.5            | 52.5         | 42.0                             | 12.0 | 3500  | 0.8       | FSA3KK153E142EL5 |
| 1000 | 600 | 0.018     | 18         | 11   | 5   | 15   | 2.7            | 63.0         | 35.0                             | 12.0 | 3500  | 0.8       | FSA3KK183E142EL5 |
| 1000 | 600 | 0.02      | 18         | 12   | 6   | 15   | 2.8            | 70.0         | 32.0                             | 10.0 | 3500  | 0.8       | FSA3KK203E172EL5 |
| 1000 | 600 | 0.022     | 18         | 12   | 6   | 15   | 3.0            | 77.0         | 29.0                             | 10.0 | 3500  | 0.8       | FSA3KK223E172EL5 |
| 1000 | 600 | 0.027     | 18         | 13.5 | 7.5 | 15   | 3.5            | 94.5         | 24.0                             | 12.0 | 3500  | 0.8       | FSA3KK273E292EL5 |
| 1000 | 600 | 0.033     | 18         | 13.5 | 7.5 | 15   | 4.0            | 115.5        | 19.0                             | 12.0 | 3500  | 0.8       | FSA3KK333E292EL5 |
| 1000 | 600 | 0.039     | 18         | 14.5 | 8.5 | 15   | 4.5            | 136.5        | 16.0                             | 12.0 | 3500  | 0.8       | FSA3KK393E342EL5 |
| 1000 | 600 | 0.047     | 18         | 14.5 | 8.5 | 15   | 4.9            | 164.5        | 14.0                             | 12.0 | 3500  | 0.8       | FSA3KK473E342EL5 |
| 1000 | 600 | 0.027     | 26         | 15.5 | 6   | 22.5 | 3.8            | 56.7         | 24.0                             | 15.0 | 2100  | 0.8       | FSA3KK273F142FL5 |
| 1000 | 600 | 0.033     | 26         | 15.5 | 6   | 22.5 | 4.3            | 69.3         | 19.0                             | 15.0 | 2100  | 0.8       | FSA3KK333F142FL5 |
| 1000 | 600 | 0.039     | 26         | 15.5 | 6   | 22.5 | 4.8            | 81.9         | 16.0                             | 15.0 | 2100  | 0.8       | FSA3KK393F142FL5 |
| 1000 | 600 | 0.047     | 26         | 16.5 | 7   | 22.5 | 5.0            | 98.7         | 15.0                             | 15.0 | 2100  | 0.8       | FSA3KK473F172FL5 |
| 1000 | 600 | 0.056     | 26         | 16.5 | 7   | 22.5 | 5.4            | 117.6        | 14.5                             | 15.0 | 2100  | 0.8       | FSA3KK563F172FL5 |
| 1000 | 600 | 0.068     | 26         | 17   | 8.5 | 22.5 | 5.6            | 142.8        | 14.0                             | 15.0 | 2100  | 0.8       | FSA3KK683F202FL5 |
| 1000 | 600 | 0.082     | 26         | 19   | 10  | 22.5 | 5.8            | 172.2        | 13.5                             | 15.0 | 2100  | 0.8       | FSA3KK823F242FL5 |
| 1000 | 600 | 0.1       | 26         | 19   | 10  | 22.5 | 6.0            | 210.0        | 13.0                             | 15.0 | 2100  | 0.8       | FSA3KK104F242FL5 |
| 1000 | 600 | 0.12      | 26         | 20   | 11  | 22.5 | 6.5            | 180.0        | 12.5                             | 15.0 | 1500  | 0.8       | FSA3KK124F262FL5 |
| 1000 | 600 | 0.15      | 26         | 22   | 12  | 22.5 | 7.0            | 225.0        | 11.0                             | 15.0 | 1500  | 0.8       | FSA3KK154F272FL5 |
| 1000 | 600 | 0.1       | 32         | 17   | 8   | 27.5 | 4.5            | 90.0         | 25.0                             | 20.0 | 900   | 0.8       | FSA3KK104G142GL5 |
| 1000 | 600 | 0.12      | 32         | 18   | 9   | 27.5 | 4.8            | 108.0        | 22.0                             | 20.0 | 900   | 0.8       | FSA3KK124G152GL5 |
| 1000 | 600 | 0.15      | 32         | 20   | 11  | 27.5 | 5.0            | 135.0        | 21.0                             | 20.0 | 900   | 0.8       | FSA3KK154G182GL5 |
| 1000 | 600 | 0.18      | 32         | 22   | 13  | 27.5 | 5.5            | 162.0        | 18.0                             | 20.0 | 900   | 0.8       | FSA3KK184G212GL5 |
| 1000 | 600 | 0.22      | 32         | 22   | 13  | 27.5 | 6.0            | 198.0        | 14.0                             | 20.0 | 900   | 0.8       | FSA3KK224G212GL5 |
| 1000 | 600 | 0.27      | 32         | 24.5 | 13  | 27.5 | 6.5            | 243.0        | 13.5                             | 20.0 | 900   | 0.8       | FSA3KK274G222GL5 |
| 1000 | 600 | 0.33      | 32         | 28   | 14  | 27.5 | 7.0            | 297.0        | 12.0                             | 20.0 | 900   | 0.8       | FSA3KK334G262GL5 |
| 1000 | 600 | 0.39      | 32         | 33   | 18  | 27.5 | 7.5            | 351.0        | 11.0                             | 20.0 | 900   | 0.8       | FSA3KK394G342GL5 |
| 1000 | 600 | 0.47      | 32         | 33   | 18  | 27.5 | 8.0            | 423.0        | 10.0                             | 20.0 | 900   | 0.8       | FSA3KK474G342GL5 |
| 1000 | 600 | 0.56      | 32         | 37   | 22  | 27.5 | 8.5            | 504.0        | 9.0                              | 20.0 | 900   | 1.0       | FSA3KK564G402GL5 |
| 1000 | 600 | 0.68      | 32         | 37   | 22  | 27.5 | 9.5            | 612.0        | 8.0                              | 20.0 | 900   | 1.0       | FSA3KK684G402GL5 |
| 1000 | 600 | 0.18      | 42         | 22   | 11  | 37.5 | 6.0            | 90.0         | 18.0                             | 25.0 | 500   | 1.0       | FSA3KK184K852KL5 |
| 1000 | 600 | 0.22      | 42         | 22   | 11  | 37.5 | 6.5            | 110.0        | 14.0                             | 25.0 | 500   | 1.0       | FSA3KK224K852KL5 |
| 1000 | 600 | 0.27      | 42         | 24   | 13  | 37.5 | 6.8            | 135.0        | 13.0                             | 25.0 | 500   | 1.0       | FSA3KK274K112KL5 |
| 1000 | 600 | 0.33      | 42         | 24   | 13  | 37.5 | 7.2            | 165.0        | 12.0                             | 25.0 | 500   | 1.0       | FSA3KK334K112KL5 |
| 1000 | 600 | 0.39      | 42         | 28   | 17  | 37.5 | 7.4            | 195.0        | 11.5                             | 25.0 | 500   | 1.0       | FSA3KK394K172KL5 |
| 1000 | 600 | 0.47      | 42         | 28   | 17  | 37.5 | 7.6            | 235.0        | 11.0                             | 25.0 | 500   | 1.0       | FSA3KK474K172KL5 |
| 1000 | 600 | 0.56      | 42         | 28   | 17  | 37.5 | 8.0            | 280.0        | 10.5                             | 25.0 | 500   | 1.0       | FSA3KK564K172KL5 |
| 1000 | 600 | 0.68      | 42         | 32   | 19  | 37.5 | 8.5            | 340.0        | 10.0                             | 25.0 | 500   | 1.0       | FSA3KK684K212KL5 |
| 1000 | 600 | 0.82      | 42         | 40   | 20  | 37.5 | 10.0           | 410.0        | 9.0                              | 25.0 | 500   | 1.0       | FSA3KK824K242KL5 |
| 1000 | 600 | 1.0       | 42         | 40   | 20  | 37.5 | 11.0           | 500.0        | 7.0                              | 25.0 | 500   | 1.0       | FSA3KK105K242KL5 |
| 1000 | 600 | 1.2       | 42         | 44   | 24  | 37.5 | 12.0           | 600.0        | 6.5                              | 25.0 | 500   | 1.0       | FSA3KK125K322KL5 |

# Double Metallized Polypropylene Film Snubber Capacitors

## FSA Series - 630 ~ 2000VDC



### Rating and Part Number

| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|      |     | μF        | mm         | mm   | mm  | mm   | 70°C A         | A            | mΩ                               | nH   | V/us  | mm        |                  |
| 1000 | 600 | 1.5       | 42         | 44   | 24  | 37.5 | 13.0           | 750.0        | 6.0                              | 25.0 | 500   | 1.0       | FSA3KK155K322KL5 |
| 1000 | 600 | 1.8       | 42         | 45   | 30  | 37.5 | 15.0           | 900.0        | 5.0                              | 25.0 | 500   | 1.0       | FSA3KK185K422KL5 |
| 1000 | 600 | 2.2       | 42         | 45   | 30  | 37.5 | 16.0           | 1100.0       | 4.0                              | 25.0 | 500   | 1.0       | FSA3KK225K422KL5 |
| 1600 | 650 | 0.0033    | 18         | 11   | 5   | 15   | 1.1            | 19.8         | 190.0                            | 12.0 | 6000  | 0.8       | FSA3WK332E142EL5 |
| 1600 | 650 | 0.0047    | 18         | 11   | 5   | 15   | 1.3            | 28.2         | 165.0                            | 12.0 | 6000  | 0.8       | FSA3WK472E142EL5 |
| 1600 | 650 | 0.0056    | 18         | 11   | 5   | 15   | 1.4            | 33.6         | 120.0                            | 12.0 | 6000  | 0.8       | FSA3WK562E142EL5 |
| 1600 | 650 | 0.0068    | 18         | 11   | 5   | 15   | 1.6            | 40.8         | 100.0                            | 12.0 | 6000  | 0.8       | FSA3WK682E142EL5 |
| 1600 | 650 | 0.0082    | 18         | 11   | 5   | 15   | 1.8            | 49.2         | 95.0                             | 12.0 | 6000  | 0.8       | FSA3WK822E142EL5 |
| 1600 | 650 | 0.01      | 18         | 11   | 5   | 15   | 2.0            | 60.0         | 65.0                             | 12.0 | 6000  | 0.8       | FSA3WK103E142EL5 |
| 1600 | 650 | 0.012     | 18         | 12   | 6   | 15   | 2.3            | 72.0         | 50.0                             | 12.0 | 6000  | 0.8       | FSA3WK123E172EL5 |
| 1600 | 650 | 0.015     | 18         | 12   | 6   | 15   | 2.5            | 90.0         | 45.0                             | 12.0 | 6000  | 0.8       | FSA3WK153E172EL5 |
| 1600 | 650 | 0.018     | 18         | 13.5 | 7.5 | 15   | 3.0            | 108.0        | 35.0                             | 12.0 | 6000  | 0.8       | FSA3WK183E292EL5 |
| 1600 | 650 | 0.022     | 18         | 13.5 | 7.5 | 15   | 3.2            | 132.0        | 30.0                             | 12.0 | 6000  | 0.8       | FSA3WK223E292EL5 |
| 1600 | 650 | 0.027     | 18         | 14.5 | 8.5 | 15   | 3.8            | 162.0        | 25.0                             | 12.0 | 6000  | 0.8       | FSA3WK273E342EL5 |
| 1600 | 650 | 0.033     | 18         | 14.5 | 8.5 | 15   | 4.0            | 198.0        | 20.0                             | 12.0 | 6000  | 0.8       | FSA3WK333E342EL5 |
| 1600 | 650 | 0.015     | 26         | 15.5 | 6   | 22.5 | 2.8            | 45.0         | 40.0                             | 15.0 | 3000  | 0.8       | FSA3WK153F142FL5 |
| 1600 | 650 | 0.022     | 26         | 15.5 | 6   | 22.5 | 3.5            | 66.0         | 30.0                             | 15.0 | 3000  | 0.8       | FSA3WK223F142FL5 |
| 1600 | 650 | 0.033     | 26         | 15.5 | 6   | 22.5 | 4.0            | 99.0         | 20.0                             | 15.0 | 3000  | 0.8       | FSA3WK333F142FL5 |
| 1600 | 650 | 0.039     | 26         | 16.5 | 7   | 22.5 | 4.8            | 117.0        | 16.0                             | 15.0 | 3000  | 0.8       | FSA3WK393F172FL5 |
| 1600 | 650 | 0.047     | 26         | 16.5 | 7   | 22.5 | 5.2            | 141.0        | 15.0                             | 15.0 | 3000  | 0.8       | FSA3WK473F172FL5 |
| 1600 | 650 | 0.056     | 26         | 17   | 8.5 | 22.5 | 5.4            | 168.0        | 14.0                             | 15.0 | 3000  | 0.8       | FSA3WK563F202FL5 |
| 1600 | 650 | 0.068     | 26         | 19   | 10  | 22.5 | 5.8            | 204.0        | 13.0                             | 15.0 | 3000  | 0.8       | FSA3WK683F242FL5 |
| 1600 | 650 | 0.082     | 26         | 19   | 10  | 22.5 | 6.0            | 246.0        | 12.0                             | 15.0 | 3000  | 0.8       | FSA3WK823F242FL5 |
| 1600 | 650 | 0.1       | 26         | 20   | 11  | 22.5 | 6.5            | 300.0        | 11.0                             | 15.0 | 3000  | 0.8       | FSA3WK104F262FL5 |
| 1600 | 650 | 0.039     | 32         | 17   | 8   | 27.5 | 3.8            | 78.0         | 30.0                             | 20.0 | 2000  | 0.8       | FSA3WK393G142GL5 |
| 1600 | 650 | 0.047     | 32         | 17   | 8   | 27.5 | 4.0            | 94.0         | 29.0                             | 20.0 | 2000  | 0.8       | FSA3WK473G142GL5 |
| 1600 | 650 | 0.056     | 32         | 17   | 8   | 27.5 | 4.5            | 112.0        | 28.0                             | 20.0 | 2000  | 0.8       | FSA3WK563G142GL5 |
| 1600 | 650 | 0.068     | 32         | 18   | 9   | 27.5 | 5.0            | 136.0        | 24.0                             | 20.0 | 2000  | 0.8       | FSA3WK683G152GL5 |
| 1600 | 650 | 0.082     | 32         | 20   | 11  | 27.5 | 5.5            | 164.0        | 20.0                             | 20.0 | 2000  | 0.8       | FSA3WK823G182GL5 |
| 1600 | 650 | 0.1       | 32         | 22   | 13  | 27.5 | 6.0            | 200.0        | 18.0                             | 20.0 | 2000  | 0.8       | FSA3WK104G212GL5 |
| 1600 | 650 | 0.12      | 32         | 22   | 13  | 27.5 | 6.5            | 240.0        | 16.0                             | 20.0 | 2000  | 0.8       | FSA3WK124G212GL5 |
| 1600 | 650 | 0.15      | 32         | 24.5 | 13  | 27.5 | 7.0            | 300.0        | 14.0                             | 20.0 | 2000  | 0.8       | FSA3WK154G222GL5 |
| 1600 | 650 | 0.18      | 32         | 28   | 14  | 27.5 | 7.5            | 360.0        | 12.0                             | 20.0 | 2000  | 0.8       | FSA3WK184G262GL5 |
| 1600 | 650 | 0.22      | 32         | 33   | 18  | 27.5 | 8.5            | 440.0        | 10.0                             | 20.0 | 2000  | 0.8       | FSA3WK224G342GL5 |
| 1600 | 650 | 0.27      | 32         | 33   | 18  | 27.5 | 9.0            | 540.0        | 9.5                              | 20.0 | 2000  | 0.8       | FSA3WK274G342GL5 |
| 1600 | 650 | 0.33      | 32         | 33   | 18  | 27.5 | 10.0           | 660.0        | 8.0                              | 20.0 | 2000  | 0.8       | FSA3WK334G342GL5 |
| 1600 | 650 | 0.39      | 32         | 37   | 22  | 27.5 | 11.0           | 780.0        | 7.0                              | 20.0 | 2000  | 1.0       | FSA3WK394G402GL5 |
| 1600 | 650 | 0.47      | 32         | 37   | 22  | 27.5 | 12.0           | 940.0        | 6.0                              | 20.0 | 2000  | 1.0       | FSA3WK474G402GL5 |
| 1600 | 650 | 0.082     | 42         | 22   | 11  | 37.5 | 4.8            | 98.4         | 28.0                             | 25.0 | 1200  | 1.0       | FSA3WK823K852KL5 |
| 1600 | 650 | 0.1       | 42         | 22   | 11  | 37.5 | 5.0            | 120.0        | 24.0                             | 25.0 | 1200  | 1.0       | FSA3WK104K852KL5 |
| 1600 | 650 | 0.12      | 42         | 22   | 11  | 37.5 | 5.5            | 144.0        | 22.0                             | 25.0 | 1200  | 1.0       | FSA3WK124K852KL5 |
| 1600 | 650 | 0.15      | 42         | 22   | 11  | 37.5 | 5.8            | 180.0        | 20.0                             | 25.0 | 1200  | 1.0       | FSA3WK154K852KL5 |
| 1600 | 650 | 0.18      | 42         | 24   | 13  | 37.5 | 6.0            | 216.0        | 18.0                             | 25.0 | 1200  | 1.0       | FSA3WK184K112KL5 |
| 1600 | 650 | 0.22      | 42         | 24   | 13  | 37.5 | 6.2            | 264.0        | 17.0                             | 25.0 | 1200  | 1.0       | FSA3WK224K112KL5 |
| 1600 | 650 | 0.27      | 42         | 24   | 13  | 37.5 | 6.5            | 324.0        | 15.0                             | 25.0 | 1200  | 1.0       | FSA3WK274K112KL5 |
| 1600 | 650 | 0.33      | 42         | 28.5 | 16  | 37.5 | 6.8            | 396.0        | 14.0                             | 25.0 | 1200  | 1.0       | FSA3WK334K862KL5 |
| 1600 | 650 | 0.39      | 42         | 28.5 | 16  | 37.5 | 7.5            | 468.0        | 12.5                             | 25.0 | 1200  | 1.0       | FSA3WK394K862KL5 |
| 1600 | 650 | 0.47      | 42         | 32   | 19  | 37.5 | 8.0            | 564.0        | 12.0                             | 25.0 | 1200  | 1.0       | FSA3WK474K212KL5 |
| 1600 | 650 | 0.56      | 42         | 40   | 20  | 37.5 | 9.0            | 672.0        | 11.0                             | 25.0 | 1200  | 1.0       | FSA3WK564K242KL5 |
| 1600 | 650 | 0.68      | 42         | 40   | 20  | 37.5 | 9.5            | 816.0        | 10.5                             | 25.0 | 1200  | 1.0       | FSA3WK684K242KL5 |
| 1600 | 650 | 0.82      | 42         | 44   | 24  | 37.5 | 10.5           | 984.0        | 9.0                              | 25.0 | 1200  | 1.0       | FSA3WK824K322KL5 |
| 1600 | 650 | 1         | 42         | 44   | 24  | 37.5 | 12.0           | 1200.0       | 7.5                              | 25.0 | 1200  | 1.0       | FSA3WK105K322KL5 |
| 1600 | 650 | 1.2       | 42         | 45   | 30  | 37.5 | 14.0           | 1440.0       | 6.0                              | 25.0 | 1200  | 1.0       | FSA3WK125K422KL5 |
| 2000 | 700 | 0.001     | 18         | 11   | 5   | 15   | 0.5            | 9.5          | 630.0                            | 12.0 | 9500  | 0.8       | FSA3DK102E142EL5 |
| 2000 | 700 | 0.0012    | 18         | 11   | 5   | 15   | 0.6            | 11.4         | 500.0                            | 12.0 | 9500  | 0.8       | FSA3DK122E142EL5 |
| 2000 | 700 | 0.0015    | 18         | 11   | 5   | 15   | 0.7            | 14.3         | 420.0                            | 12.0 | 9500  | 0.8       | FSA3DK152E142EL5 |

# Double Metallized Polypropylene Film Snubber Capacitors

## FSA Series - 630 ~ 2000VDC



### Rating and Part Number

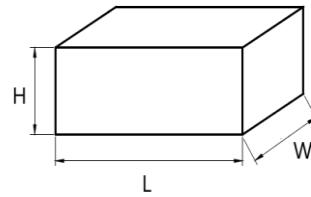
| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|      |     | μF        | mm         | mm   | mm  | mm   | 70°C A         | A            | mΩ                               | nH   | V/us  | mm        |                  |
| 2000 | 700 | 0.0018    | 18         | 11   | 5   | 15   | 0.8            | 17.1         | 350.0                            | 12.0 | 9500  | 0.8       | FSA3DK182E142EL5 |
| 2000 | 700 | 0.0022    | 18         | 11   | 5   | 15   | 0.9            | 20.9         | 300.0                            | 12.0 | 9500  | 0.8       | FSA3DK222E142EL5 |
| 2000 | 700 | 0.0027    | 18         | 11   | 5   | 15   | 1.0            | 25.7         | 240.0                            | 12.0 | 9500  | 0.8       | FSA3DK272E142EL5 |
| 2000 | 700 | 0.0033    | 18         | 11   | 5   | 15   | 1.2            | 31.4         | 190.0                            | 12.0 | 9500  | 0.8       | FSA3DK332E142EL5 |
| 2000 | 700 | 0.0039    | 18         | 11   | 5   | 15   | 1.3            | 37.1         | 165.0                            | 12.0 | 9500  | 0.8       | FSA3DK392E142EL5 |
| 2000 | 700 | 0.0047    | 18         | 11   | 5   | 15   | 1.4            | 44.7         | 135.0                            | 12.0 | 9500  | 0.8       | FSA3DK472E142EL5 |
| 2000 | 700 | 0.0056    | 18         | 12   | 6   | 15   | 1.6            | 53.2         | 110.0                            | 12.0 | 9500  | 0.8       | FSA3DK562E172EL5 |
| 2000 | 700 | 0.0068    | 18         | 12   | 6   | 15   | 1.8            | 64.6         | 95.0                             | 12.0 | 9500  | 0.8       | FSA3DK682E172EL5 |
| 2000 | 700 | 0.0082    | 18         | 12   | 6   | 15   | 2.0            | 77.9         | 80.0                             | 12.0 | 9500  | 0.8       | FSA3DK822E172EL5 |
| 2000 | 700 | 0.01      | 18         | 13.5 | 7.5 | 15   | 2.5            | 95.0         | 65.0                             | 12.0 | 9500  | 0.8       | FSA3DK103E292EL5 |
| 2000 | 700 | 0.012     | 18         | 14.5 | 8.5 | 15   | 2.8            | 114.0        | 50.0                             | 12.0 | 9500  | 0.8       | FSA3DK123E342EL5 |
| 2000 | 700 | 0.015     | 18         | 14.5 | 8.5 | 15   | 3.0            | 142.5        | 45.0                             | 12.0 | 9500  | 0.8       | FSA3DK153E342EL5 |
| 2000 | 700 | 0.018     | 18         | 16   | 10  | 15   | 3.8            | 171.0        | 35.0                             | 12.0 | 9500  | 0.8       | FSA3DK183E432EL5 |
| 2000 | 700 | 0.001     | 26         | 15.5 | 6   | 22.5 | 0.6            | 4.5          | 550.0                            | 15.0 | 4500  | 0.8       | FSA3DK102F142FL5 |
| 2000 | 700 | 0.0012    | 26         | 15.5 | 6   | 22.5 | 0.7            | 5.4          | 450.0                            | 15.0 | 4500  | 0.8       | FSA3DK122F142FL5 |
| 2000 | 700 | 0.0015    | 26         | 15.5 | 6   | 22.5 | 0.8            | 6.8          | 360.0                            | 15.0 | 4500  | 0.8       | FSA3DK152F142FL5 |
| 2000 | 700 | 0.0018    | 26         | 15.5 | 6   | 22.5 | 0.9            | 8.1          | 300.0                            | 15.0 | 4500  | 0.8       | FSA3DK182F142FL5 |
| 2000 | 700 | 0.0022    | 26         | 15.5 | 6   | 22.5 | 1.0            | 9.9          | 250.0                            | 15.0 | 4500  | 0.8       | FSA3DK222F142FL5 |
| 2000 | 700 | 0.0027    | 26         | 15.5 | 6   | 22.5 | 1.2            | 12.2         | 230.0                            | 15.0 | 4500  | 0.8       | FSA3DK272F142FL5 |
| 2000 | 700 | 0.0033    | 26         | 15.5 | 6   | 22.5 | 1.2            | 14.9         | 200.0                            | 15.0 | 4500  | 0.8       | FSA3DK332F142FL5 |
| 2000 | 700 | 0.0039    | 26         | 15.5 | 6   | 22.5 | 1.4            | 17.6         | 180.0                            | 15.0 | 4500  | 0.8       | FSA3DK392F142FL5 |
| 2000 | 700 | 0.0047    | 26         | 15.5 | 6   | 22.5 | 1.6            | 21.2         | 140.0                            | 15.0 | 4500  | 0.8       | FSA3DK472F142FL5 |
| 2000 | 700 | 0.0056    | 26         | 15.5 | 6   | 22.5 | 1.8            | 25.2         | 120.0                            | 15.0 | 4500  | 0.8       | FSA3DK562F142FL5 |
| 2000 | 700 | 0.0068    | 26         | 15.5 | 6   | 22.5 | 2.0            | 30.6         | 95.0                             | 15.0 | 4500  | 0.8       | FSA3DK682F142FL5 |
| 2000 | 700 | 0.0082    | 26         | 15.5 | 6   | 22.5 | 2.2            | 36.9         | 75.0                             | 15.0 | 4500  | 0.8       | FSA3DK822F142FL5 |
| 2000 | 700 | 0.01      | 26         | 15.5 | 6   | 22.5 | 2.3            | 45.0         | 65.0                             | 15.0 | 4500  | 0.8       | FSA3DK103F142FL5 |
| 2000 | 700 | 0.012     | 26         | 15.5 | 6   | 22.5 | 2.5            | 54.0         | 60.0                             | 15.0 | 4500  | 0.8       | FSA3DK123F142FL5 |
| 2000 | 700 | 0.015     | 26         | 15.5 | 6   | 22.5 | 2.8            | 67.5         | 45.0                             | 15.0 | 4500  | 0.8       | FSA3DK153F142FL5 |
| 2000 | 700 | 0.018     | 26         | 15.5 | 6   | 22.5 | 3.2            | 81.0         | 35.0                             | 15.0 | 4500  | 0.8       | FSA3DK183F142FL5 |
| 2000 | 700 | 0.022     | 26         | 16.5 | 7   | 22.5 | 4.0            | 99.0         | 26.0                             | 15.0 | 4500  | 0.8       | FSA3DK223F172FL5 |
| 2000 | 700 | 0.027     | 26         | 16.5 | 7   | 22.5 | 4.5            | 121.5        | 20.0                             | 15.0 | 4500  | 0.8       | FSA3DK273F172FL5 |
| 2000 | 700 | 0.033     | 26         | 17   | 8.5 | 22.5 | 5.2            | 148.5        | 18.0                             | 15.0 | 4500  | 0.8       | FSA3DK333F202FL5 |
| 2000 | 700 | 0.039     | 26         | 19   | 10  | 22.5 | 5.8            | 175.5        | 15.0                             | 15.0 | 4500  | 0.8       | FSA3DK393F242FL5 |
| 2000 | 700 | 0.047     | 26         | 19   | 10  | 22.5 | 6.0            | 211.5        | 13.0                             | 15.0 | 4500  | 0.8       | FSA3DK473F242FL5 |
| 2000 | 700 | 0.056     | 26         | 20   | 11  | 22.5 | 6.5            | 252.0        | 12.0                             | 15.0 | 4500  | 0.8       | FSA3DK563F262FL5 |
| 2000 | 700 | 0.022     | 32         | 17   | 8   | 27.5 | 3.0            | 55.0         | 45.0                             | 20.0 | 2500  | 0.8       | FSA3DK223G142GL5 |
| 2000 | 700 | 0.027     | 32         | 17   | 8   | 27.5 | 3.5            | 67.5         | 40.0                             | 20.0 | 2500  | 0.8       | FSA3DK273G142GL5 |
| 2000 | 700 | 0.033     | 32         | 18   | 9   | 27.5 | 4.0            | 82.5         | 35.0                             | 20.0 | 2500  | 0.8       | FSA3DK333G152GL5 |
| 2000 | 700 | 0.039     | 32         | 20   | 11  | 27.5 | 4.5            | 97.5         | 28.0                             | 20.0 | 2500  | 0.8       | FSA3DK393G182GL5 |
| 2000 | 700 | 0.047     | 32         | 20   | 11  | 27.5 | 4.8            | 117.5        | 25.0                             | 20.0 | 2500  | 0.8       | FSA3DK473G182GL5 |
| 2000 | 700 | 0.056     | 32         | 22   | 13  | 27.5 | 5.0            | 140.0        | 24.0                             | 20.0 | 2500  | 0.8       | FSA3DK563G212GL5 |
| 2000 | 700 | 0.068     | 32         | 22   | 13  | 27.5 | 5.5            | 170.0        | 22.0                             | 20.0 | 2500  | 0.8       | FSA3DK683G212GL5 |
| 2000 | 700 | 0.082     | 32         | 24.5 | 13  | 27.5 | 6.0            | 205.0        | 20.0                             | 20.0 | 2500  | 0.8       | FSA3DK823G222GL5 |
| 2000 | 700 | 0.1       | 32         | 28   | 14  | 27.5 | 6.5            | 250.0        | 18.0                             | 20.0 | 2500  | 0.8       | FSA3DK104G262GL5 |
| 2000 | 700 | 0.12      | 32         | 33   | 18  | 27.5 | 7.0            | 300.0        | 16.0                             | 20.0 | 2500  | 0.8       | FSA3DK124G342GL5 |
| 2000 | 700 | 0.15      | 32         | 33   | 18  | 27.5 | 7.5            | 375.0        | 14.0                             | 20.0 | 2500  | 0.8       | FSA3DK154G342GL5 |
| 2000 | 700 | 0.18      | 32         | 37   | 22  | 27.5 | 8.0            | 450.0        | 12.0                             | 20.0 | 2500  | 1.0       | FSA3DK184G402GL5 |
| 2000 | 700 | 0.22      | 32         | 37   | 22  | 27.5 | 8.5            | 550.0        | 10.0                             | 20.0 | 2500  | 1.0       | FSA3DK224G402GL5 |
| 2000 | 700 | 0.033     | 42         | 22   | 11  | 37.5 | 4.0            | 49.5         | 35.0                             | 25.0 | 1500  | 1.0       | FSA3DK333K852KL5 |
| 2000 | 700 | 0.039     | 42         | 22   | 11  | 37.5 | 4.5            | 58.5         | 28.0                             | 25.0 | 1500  | 1.0       | FSA3DK393K852KL5 |
| 2000 | 700 | 0.047     | 42         | 22   | 11  | 37.5 | 4.8            | 70.5         | 26.0                             | 25.0 | 1500  | 1.0       | FSA3DK473K852KL5 |
| 2000 | 700 | 0.056     | 42         | 22   | 11  | 37.5 | 5.0            | 84.0         | 24.0                             | 25.0 | 1500  | 1.0       | FSA3DK563K852KL5 |
| 2000 | 700 | 0.068     | 42         | 22   | 11  | 37.5 | 5.4            | 102.0        | 23.0                             | 25.0 | 1500  | 1.0       | FSA3DK683K852KL5 |
| 2000 | 700 | 0.082     | 42         | 22   | 11  | 37.5 | 5.8            | 123.0        | 22.0                             | 25.0 | 1500  | 1.0       | FSA3DK823K852KL5 |
| 2000 | 700 | 0.1       | 42         | 24   | 13  | 37.5 | 6.5            | 150.0        | 18.0                             | 25.0 | 1500  | 1.0       | FSA3DK104K112KL5 |
| 2000 | 700 | 0.12      | 42         | 24   | 13  | 37.5 | 7.0            | 180.0        | 16.0                             | 25.0 | 1500  | 1.0       | FSA3DK124K112KL5 |

### Rating and Part Number

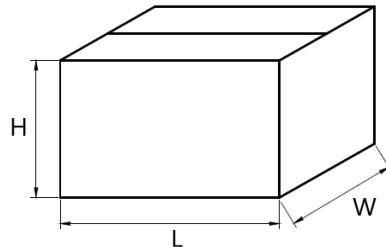
| Vdc  | Vac | Cap Value<br>μF | Dimensions |         |         |         | Irms<br>100KHz<br>70°C A | Peak Current<br>A | ESR <sub>Typical</sub><br>100KHZ<br>mΩ | ESL<br>nH | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|------|-----|-----------------|------------|---------|---------|---------|--------------------------|-------------------|--|-----------|---------------|-----------------|------------------|
|      |     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm |                          |                   |  |           |               |                 |                  |
| 2000 | 700 | 0.15            | 42         | 28.5    | 16      | 37.5    | 7.5                      | 225.0             | 15.0                                   | 25.0      | 1500          | 1.0             | FSA3DK154K862KL5 |
| 2000 | 700 | 0.18            | 42         | 28.5    | 16      | 37.5    | 8.0                      | 270.0             | 14.0                                   | 25.0      | 1500          | 1.0             | FSA3DK184K862KL5 |
| 2000 | 700 | 0.22            | 42         | 32      | 19      | 37.5    | 8.5                      | 330.0             | 12.0                                   | 25.0      | 1500          | 1.0             | FSA3DK224K212KL5 |
| 2000 | 700 | 0.27            | 42         | 40      | 20      | 37.5    | 9.0                      | 405.0             | 11.0                                   | 25.0      | 1500          | 1.0             | FSA3DK274K242KL5 |
| 2000 | 700 | 0.33            | 42         | 40      | 20      | 37.5    | 9.5                      | 495.0             | 10.5                                   | 25.0      | 1500          | 1.0             | FSA3DK334K242KL5 |
| 2000 | 700 | 0.39            | 42         | 44      | 24      | 37.5    | 10.0                     | 585.0             | 9.5                                    | 25.0      | 1500          | 1.0             | FSA3DK394K322KL5 |
| 2000 | 700 | 0.47            | 42         | 44      | 24      | 37.5    | 10.5                     | 705.0             | 9.0                                    | 25.0      | 1500          | 1.0             | FSA3DK474K322KL5 |
| 2000 | 700 | 0.56            | 42         | 45      | 30      | 37.5    | 12.0                     | 840.0             | 7.5                                    | 25.0      | 1500          | 1.0             | FSA3DK564K422KL5 |
| 2000 | 700 | 0.68            | 42         | 45      | 30      | 37.5    | 14.0                     | 1020.0            | 6.0                                    | 25.0      | 1500          | 1.0             | FSA3DK684K422KL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 10    | C13       | 13        | 11   | 5   |                    | 1,200       | 1,488     |
|       | C16       | 13        | 12   | 6   |                    | 1,200       | 1,224     |
|       | C24       | 13        | 13   | 7   |                    | 1,200       | 1,056     |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F14       | 26        | 15.5 | 6   | 612                | 612         | 350       |
|       | F17       | 26        | 16.5 | 7   | 528                | 528         | 300       |
|       | F20       | 26        | 17   | 8.5 | 432                | 432         | 250       |
|       | F24       | 26        | 19   | 10  | 372                | 372         | 210       |
|       | F26       | 26        | 20   | 11  | 336                | 336         | 190       |
|       | F27       | 26        | 22   | 12  | 300                | 300         | 170       |
| 27.5  | G14       | 32        | 17   | 8   | 380                | 380         |           |
|       | G15       | 32        | 18   | 9   | 340                | 340         |           |
|       | G18       | 32        | 20   | 11  | 280                | 280         |           |
|       | G21       | 32        | 22   | 13  | 230                | 230         |           |
|       | G22       | 32        | 24.5 | 13  | 230                | 230         |           |
|       | G26       | 32        | 28   | 14  | 220                | 220         |           |
|       | G34       | 32        | 33   | 18  | 170                | 170         |           |
|       | G40       | 32        | 37   | 22  | 140                | 140         |           |
| 37.5  | K11       | 42        | 24   | 13  | 161                | 161         |           |
|       | K17       | 42        | 28   | 17  | 126                | 126         |           |
|       | K21       | 42        | 32   | 19  | 112                | 112         |           |
|       | K24       | 42        | 40   | 20  | 105                | 105         |           |
|       | K32       | 42        | 44   | 24  | 91                 | 91          |           |
|       | K42       | 42        | 45   | 30  | 70                 | 70          |           |
|       | K47       | 42        | 50   | 35  | 63                 | 63          |           |
|       | K85       | 42        | 22   | 11  | 196                | 196         |           |
|       | K86       | 42        | 28.5 | 16  | 133                | 133         |           |

## Overview

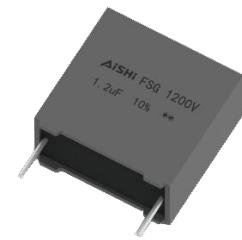
The FSG capacitor is constructed of metallized polypropylene film with double-sided metallized film encapsulated with epoxy resin in a plastic box, with tinned copper wires. The FSG series is suitable for harsh environmental conditions and compliant to THB Grade IIIB.

## Features

- High ripple current
- Self-healing property
- Low losses
- Small inherent temperature rise
- High contact reliability
- Operating temperature range: - 40°C to 105°C
- Suitable for harsh environmental conditions
- THB Grade IIIB (85°C, 85% RH, 1000h at U<sub>NDC</sub>)

## Applications

Widely used in high voltage, high frequency circuit, snubber and SCR commutating circuits.



## Qualification

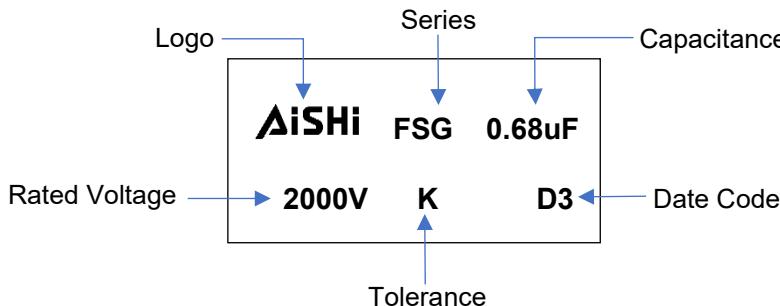
|                    |                       |
|--------------------|-----------------------|
| Reference Standard | IEC 61071, EN 61071   |
| Climate Category   | 40/105/56 IEC 60068-1 |



## General Technical Data

|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film   |
| Voltage Range               | 630Vdc to 2000Vdc   |
| Capacitance Range           | 0.001µF to 4.7µF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C  |
| Operating Temperature Range | -55°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)   |
| Climatic Category           | 55/105/56 IEC 60068-1   |
| Dissipation Factor          | 0.0010 (0.1%) at 25°C, 1KHz   |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 100 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 30 000 s |

## Marking



## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Part Number System

| F              | SQ  | 3D   | K                   | 684   | K42                      | 2KL                          | 5                               |
|----------------|---|--|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series  | Voltage (VDC)                                      | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | Snubber, pulse Capacitor, AEC-Q200, Double-sided Metallized PP Film | 630=2L<br>1000=3K<br>1200=3B<br>1600=3W<br>2000=3D | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

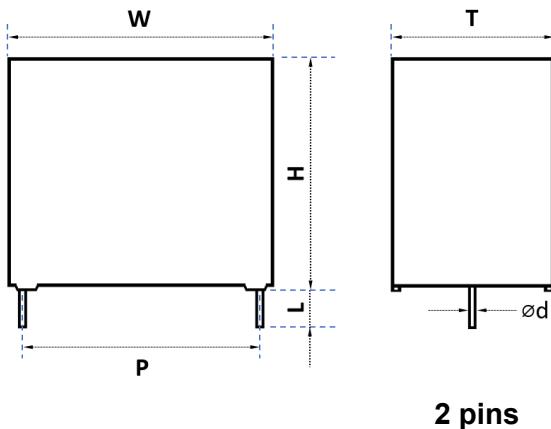
## Terminal Code

| Digit One (Lead/Terminal Type) |   | Digit Two (Lead Space) |   | Digit Three (Lead Ipsilateral) |   |
|--------------------------------|---|------------------------|---|--------------------------------|---|
| 2 leads for long               | L | 15.0mm                 | E | 10.2mm                         | B |
| 2 leads for straight cut       | 2 | 22.5mm                 | F | 12.7mm                         | G |
| 2 leads for forming cut        | E | 27.5mm                 | G | 20.3mm                         | D |
| 4 leads for straight cut       | 4 | 37.5mm                 | K | N/A                            | L |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| 20.0mm min  | L |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |     |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|-----|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T   | Tolerance | P     | Tolerance | Ød        | Tolerance |
| C13       | 13        | 0.5       | 11   | 0.5       | 5   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C16       | 13        | 0.5       | 12   | 0.5       | 6   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C24       | 13        | 0.5       | 13   | 0.5       | 7   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| E14       | 18        | 0.5       | 11   | 0.5       | 5   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E17       | 18        | 0.5       | 12   | 0.5       | 6   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E29       | 18        | 0.5       | 13.5 | 0.5       | 7.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E34       | 18        | 0.5       | 14.5 | 0.5       | 8.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E43       | 18        | 0.5       | 16   | 0.5       | 10  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E47       | 18        | 0.5       | 19   | 0.5       | 11  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| F14       | 26        | 0.5       | 15.5 | 0.5       | 6   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F17       | 26        | 0.5       | 16.5 | 0.5       | 7   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F20       | 26        | 0.5       | 17   | 0.5       | 8.5 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F24       | 26        | 0.5       | 19   | 0.5       | 10  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F26       | 26        | 0.5       | 20   | 0.5       | 11  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F27       | 26        | 0.5       | 22   | 0.5       | 12  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| G14       | 32        | 0.8       | 17   | 0.8       | 8   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G15       | 32        | 0.8       | 18   | 0.8       | 9   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G22       | 32        | 0.8       | 24.5 | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22  | 0.8       | 27.5  | 0.5       | 1.0       | 0.05      |
| K11       | 42        | 0.8       | 24   | 0.8       | 13  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K17       | 42        | 0.8       | 28   | 0.8       | 17  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K21       | 42        | 0.8       | 32   | 0.8       | 19  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K24       | 42        | 0.8       | 40   | 0.8       | 20  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K32       | 42        | 0.8       | 44   | 0.8       | 24  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K42       | 42        | 0.8       | 45   | 0.8       | 30  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K47       | 42        | 0.8       | 50   | 0.8       | 35  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K85       | 42        | 0.8       | 22   | 0.8       | 11  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K86       | 42        | 0.8       | 28.5 | 0.8       | 16  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |

## Rating and Part Number

| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number |                  |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|-------------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |             |                  |
|      |     | μF        | mm         | mm   | mm  | mm   | 70°C A         | mΩ           | nH                               | V/us | mm    | mm        | mm          |                  |
| 630  | 400 | 0.01      | 18         | 11   | 5   | 15   | 1.8            | 30.0         | 62.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK103E142EL5 |
| 630  | 400 | 0.012     | 18         | 11   | 5   | 15   | 2.2            | 36.0         | 52.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK123E142EL5 |
| 630  | 400 | 0.015     | 18         | 11   | 5   | 15   | 2.5            | 45.0         | 42.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK153E142EL5 |
| 630  | 400 | 0.018     | 18         | 11   | 5   | 15   | 2.7            | 54.0         | 35.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK183E142EL5 |
| 630  | 400 | 0.02      | 18         | 11   | 5   | 15   | 2.8            | 60.0         | 32.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK203E142EL5 |
| 630  | 400 | 0.022     | 18         | 11   | 5   | 15   | 2.9            | 66.0         | 30.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK223E142EL5 |
| 630  | 400 | 0.027     | 18         | 12   | 6   | 15   | 3.2            | 81.0         | 25.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK273E172EL5 |
| 630  | 400 | 0.033     | 18         | 12   | 6   | 15   | 3.7            | 99.0         | 20.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK333E172EL5 |
| 630  | 400 | 0.039     | 18         | 12   | 6   | 15   | 3.9            | 117.0        | 16.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK393E172EL5 |
| 630  | 400 | 0.047     | 18         | 13.5 | 7.5 | 15   | 4.5            | 141.0        | 15.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK473E292EL5 |
| 630  | 400 | 0.056     | 18         | 13.5 | 7.5 | 15   | 4.6            | 168.0        | 14.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK563E292EL5 |
| 630  | 400 | 0.068     | 18         | 14.5 | 8.5 | 15   | 4.7            | 204.0        | 13.5                             | 12.0 | 3000  | 0.8       |             | FSG2LK683E342EL5 |
| 630  | 400 | 0.082     | 18         | 16   | 10  | 15   | 4.8            | 246.0        | 13.2                             | 12.0 | 3000  | 0.8       |             | FSG2LK823E432EL5 |
| 630  | 400 | 0.1       | 18         | 16   | 10  | 15   | 5.0            | 300.0        | 13.0                             | 12.0 | 3000  | 0.8       |             | FSG2LK104E432EL5 |
| 630  | 400 | 0.12      | 18         | 19   | 11  | 15   | 5.4            | 360.0        | 12.5                             | 12.0 | 3000  | 0.8       |             | FSG2LK124E472EL5 |
| 630  | 400 | 0.047     | 26         | 15.5 | 6   | 22.5 | 3.8            | 70.5         | 20.0                             | 15.0 | 1500  | 0.8       |             | FSG2LK473F142FL5 |
| 630  | 400 | 0.056     | 26         | 15.5 | 6   | 22.5 | 4.0            | 84.0         | 19.5                             | 15.0 | 1500  | 0.8       |             | FSG2LK563F142FL5 |
| 630  | 400 | 0.068     | 26         | 15.5 | 6   | 22.5 | 4.2            | 102.0        | 19.0                             | 15.0 | 1500  | 0.8       |             | FSG2LK683F142FL5 |
| 630  | 400 | 0.082     | 26         | 15.5 | 6   | 22.5 | 4.5            | 123.0        | 18.0                             | 15.0 | 1500  | 0.8       |             | FSG2LK823F142FL5 |
| 630  | 400 | 0.1       | 26         | 15.5 | 6   | 22.5 | 5.0            | 150.0        | 16.0                             | 15.0 | 1500  | 0.8       |             | FSG2LK104F142FL5 |
| 630  | 400 | 0.12      | 26         | 16.5 | 7   | 22.5 | 5.3            | 180.0        | 14.0                             | 15.0 | 1500  | 0.8       |             | FSG2LK124F172FL5 |
| 630  | 400 | 0.15      | 26         | 17   | 8.5 | 22.5 | 6.0            | 225.0        | 11.0                             | 15.0 | 1500  | 0.8       |             | FSG2LK154F202FL5 |
| 630  | 400 | 0.18      | 26         | 17   | 8.5 | 22.5 | 6.5            | 270.0        | 10.0                             | 15.0 | 1500  | 0.8       |             | FSG2LK184F202FL5 |
| 630  | 400 | 0.22      | 26         | 19   | 10  | 22.5 | 7.5            | 330.0        | 8.5                              | 15.0 | 1500  | 0.8       |             | FSG2LK224F242FL5 |
| 630  | 400 | 0.27      | 26         | 20   | 11  | 22.5 | 8.5            | 405.0        | 6.5                              | 15.0 | 1500  | 0.8       |             | FSG2LK274F262FL5 |
| 630  | 400 | 0.33      | 26         | 20   | 11  | 22.5 | 9.0            | 495.0        | 6.0                              | 15.0 | 1500  | 0.8       |             | FSG2LK334F262FL5 |
| 630  | 400 | 0.39      | 26         | 22   | 12  | 22.5 | 10.0           | 585.0        | 5.0                              | 15.0 | 1500  | 0.8       |             | FSG2LK394F272FL5 |
| 630  | 400 | 0.15      | 32         | 17   | 8   | 27.5 | 4.6            | 135.0        | 25.0                             | 20.0 | 900   | 0.8       |             | FSG2LK154G142GL5 |
| 630  | 400 | 0.18      | 32         | 17   | 8   | 27.5 | 4.8            | 162.0        | 22.0                             | 20.0 | 900   | 0.8       |             | FSG2LK184G142GL5 |
| 630  | 400 | 0.22      | 32         | 18   | 9   | 27.5 | 5.0            | 198.0        | 20.0                             | 20.0 | 900   | 0.8       |             | FSG2LK224G152GL5 |
| 630  | 400 | 0.27      | 32         | 20   | 11  | 27.5 | 5.5            | 243.0        | 17.5                             | 20.0 | 900   | 0.8       |             | FSG2LK274G182GL5 |
| 630  | 400 | 0.33      | 32         | 20   | 11  | 27.5 | 5.8            | 297.0        | 16.5                             | 20.0 | 900   | 0.8       |             | FSG2LK334G182GL5 |
| 630  | 400 | 0.39      | 32         | 20   | 11  | 27.5 | 6.0            | 351.0        | 16.0                             | 20.0 | 900   | 0.8       |             | FSG2LK394G182GL5 |
| 630  | 400 | 0.47      | 32         | 22   | 13  | 27.5 | 6.5            | 423.0        | 14.0                             | 20.0 | 900   | 0.8       |             | FSG2LK474G212GL5 |
| 630  | 400 | 0.56      | 32         | 22   | 13  | 27.5 | 7.0            | 504.0        | 12.0                             | 20.0 | 900   | 0.8       |             | FSG2LK564G212GL5 |
| 630  | 400 | 0.68      | 32         | 24.5 | 13  | 27.5 | 7.5            | 612.0        | 10.5                             | 20.0 | 900   | 0.8       |             | FSG2LK684G222GL5 |
| 630  | 400 | 0.82      | 32         | 28   | 14  | 27.5 | 8.5            | 738.0        | 9.0                              | 20.0 | 900   | 0.8       |             | FSG2LK824G262GL5 |
| 630  | 400 | 1         | 32         | 33   | 18  | 27.5 | 10.0           | 900.0        | 7.0                              | 20.0 | 900   | 0.8       |             | FSG2LK105G342GL5 |
| 630  | 400 | 1.2       | 32         | 33   | 18  | 27.5 | 13.0           | 1080.0       | 6.0                              | 20.0 | 900   | 0.8       |             | FSG2LK125G342GL5 |
| 630  | 400 | 1.5       | 32         | 37   | 22  | 27.5 | 15.0           | 1350.0       | 5.0                              | 20.0 | 900   | 1.0       |             | FSG2LK155G402GL5 |
| 630  | 400 | 1.8       | 32         | 37   | 22  | 27.5 | 16.0           | 1620.0       | 4.0                              | 20.0 | 900   | 1.0       |             | FSG2LK185G402GL5 |
| 630  | 400 | 0.33      | 42         | 22   | 11  | 37.5 | 6.8            | 165.0        | 13.0                             | 25.0 | 500   | 1.0       |             | FSG2LK334K852KL5 |
| 630  | 400 | 0.47      | 42         | 22   | 11  | 37.5 | 7.0            | 235.0        | 12.5                             | 25.0 | 500   | 1.0       |             | FSG2LK474K852KL5 |
| 630  | 400 | 0.56      | 42         | 22   | 11  | 37.5 | 7.5            | 280.0        | 11.0                             | 25.0 | 500   | 1.0       |             | FSG2LK564K852KL5 |
| 630  | 400 | 0.68      | 42         | 22   | 11  | 37.5 | 8.0            | 340.0        | 10.5                             | 25.0 | 500   | 1.0       |             | FSG2LK684K852KL5 |
| 630  | 400 | 0.82      | 42         | 28.5 | 16  | 37.5 | 8.0            | 410.0        | 10.5                             | 25.0 | 500   | 1.0       |             | FSG2LK824K862KL5 |
| 630  | 400 | 1.0       | 42         | 28.5 | 16  | 37.5 | 8.5            | 500.0        | 10.0                             | 25.0 | 500   | 1.0       |             | FSG2LK105K862KL5 |
| 630  | 400 | 1.5       | 42         | 28.5 | 16  | 37.5 | 9.5            | 750.0        | 9.0                              | 25.0 | 500   | 1.0       |             | FSG2LK155K862KL5 |
| 630  | 400 | 1.8       | 42         | 32   | 19  | 37.5 | 10.5           | 900.0        | 8.5                              | 25.0 | 500   | 1.0       |             | FSG2LK185K212KL5 |
| 630  | 400 | 2.2       | 42         | 40   | 20  | 37.5 | 11.5           | 1100.0       | 8.0                              | 25.0 | 500   | 1.0       |             | FSG2LK225K242KL5 |
| 630  | 400 | 2.7       | 42         | 40   | 20  | 37.5 | 13.0           | 1350.0       | 7.0                              | 25.0 | 500   | 1.0       |             | FSG2LK275K242KL5 |
| 630  | 400 | 3.3       | 42         | 44   | 24  | 37.5 | 14.0           | 1650.0       | 6.0                              | 25.0 | 500   | 1.0       |             | FSG2LK335K322KL5 |
| 630  | 400 | 3.9       | 42         | 45   | 30  | 37.5 | 15.0           | 1950.0       | 5.0                              | 25.0 | 500   | 1.0       |             | FSG2LK395K422KL5 |
| 630  | 400 | 4.7       | 42         | 50   | 35  | 37.5 | 16.0           | 2350.0       | 4.0                              | 25.0 | 500   | 1.0       |             | FSG2LK475K472KL5 |
| 1000 | 600 | 0.0082    | 18         | 11   | 5   | 15   | 1.5            | 28.7         | 80.0                             | 10.0 | 3500  | 0.8       |             | FSG3KK822E142EL5 |
| 1000 | 600 | 0.01      | 18         | 11   | 5   | 15   | 1.8            | 35.0         | 62.0                             | 12.0 | 3500  | 0.8       |             | FSG3KK103E142EL5 |

## Rating and Part Number

| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number |                  |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|-------------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |             |                  |
|      |     | μF        | mm         | mm   | mm  | mm   | 70°C A         | mΩ           | nH                               | V/us | mm    | mm        | mm          |                  |
| 1000 | 600 | 0.012     | 18         | 11   | 5   | 15   | 2.2            | 42.0         | 52.0                             | 12.0 | 3500  | 0.8       |             | FSG3KK123E142EL5 |
| 1000 | 600 | 0.015     | 18         | 11   | 5   | 15   | 2.5            | 52.5         | 42.0                             | 12.0 | 3500  | 0.8       |             | FSG3KK153E142EL5 |
| 1000 | 600 | 0.018     | 18         | 11   | 5   | 15   | 2.7            | 63.0         | 35.0                             | 12.0 | 3500  | 0.8       |             | FSG3KK183E142EL5 |
| 1000 | 600 | 0.02      | 18         | 12   | 6   | 15   | 2.8            | 70.0         | 32.0                             | 10.0 | 3500  | 0.8       |             | FSG3KK203E172EL5 |
| 1000 | 600 | 0.022     | 18         | 12   | 6   | 15   | 3.0            | 77.0         | 29.0                             | 10.0 | 3500  | 0.8       |             | FSG3KK223E172EL5 |
| 1000 | 600 | 0.027     | 18         | 13.5 | 7.5 | 15   | 3.5            | 94.5         | 24.0                             | 12.0 | 3500  | 0.8       |             | FSG3KK273E292EL5 |
| 1000 | 600 | 0.033     | 18         | 13.5 | 7.5 | 15   | 4.0            | 115.5        | 19.0                             | 12.0 | 3500  | 0.8       |             | FSG3KK333E292EL5 |
| 1000 | 600 | 0.039     | 18         | 14.5 | 8.5 | 15   | 4.5            | 136.5        | 16.0                             | 12.0 | 3500  | 0.8       |             | FSG3KK393E342EL5 |
| 1000 | 600 | 0.047     | 18         | 14.5 | 8.5 | 15   | 4.9            | 164.5        | 14.0                             | 12.0 | 3500  | 0.8       |             | FSG3KK473E342EL5 |
| 1000 | 600 | 0.027     | 26         | 15.5 | 6   | 22.5 | 3.8            | 56.7         | 24.0                             | 15.0 | 2100  | 0.8       |             | FSG3KK273F142FL5 |
| 1000 | 600 | 0.033     | 26         | 15.5 | 6   | 22.5 | 4.3            | 69.3         | 19.0                             | 15.0 | 2100  | 0.8       |             | FSG3KK333F142FL5 |
| 1000 | 600 | 0.039     | 26         | 15.5 | 6   | 22.5 | 4.8            | 81.9         | 16.0                             | 15.0 | 2100  | 0.8       |             | FSG3KK393F142FL5 |
| 1000 | 600 | 0.047     | 26         | 16.5 | 7   | 22.5 | 5.0            | 98.7         | 15.0                             | 15.0 | 2100  | 0.8       |             | FSG3KK473F172FL5 |
| 1000 | 600 | 0.056     | 26         | 16.5 | 7   | 22.5 | 5.4            | 117.6        | 14.5                             | 15.0 | 2100  | 0.8       |             | FSG3KK563F172FL5 |
| 1000 | 600 | 0.068     | 26         | 17   | 8.5 | 22.5 | 5.6            | 142.8        | 14.0                             | 15.0 | 2100  | 0.8       |             | FSG3KK683F202FL5 |
| 1000 | 600 | 0.082     | 26         | 19   | 10  | 22.5 | 5.8            | 172.2        | 13.5                             | 15.0 | 2100  | 0.8       |             | FSG3KK823F242FL5 |
| 1000 | 600 | 0.1       | 26         | 19   | 10  | 22.5 | 6.0            | 210.0        | 13.0                             | 15.0 | 2100  | 0.8       |             | FSG3KK104F242FL5 |
| 1000 | 600 | 0.12      | 26         | 20   | 11  | 22.5 | 6.5            | 180.0        | 12.5                             | 15.0 | 1500  | 0.8       |             | FSG3KK124F262FL5 |
| 1000 | 600 | 0.15      | 26         | 22   | 12  | 22.5 | 7.0            | 225.0        | 11.0                             | 15.0 | 1500  | 0.8       |             | FSG3KK154F272FL5 |
| 1000 | 600 | 0.1       | 32         | 17   | 8   | 27.5 | 4.5            | 90.0         | 25.0                             | 20.0 | 900   | 0.8       |             | FSG3KK104G142GL5 |
| 1000 | 600 | 0.12      | 32         | 18   | 9   | 27.5 | 4.8            | 108.0        | 22.0                             | 20.0 | 900   | 0.8       |             | FSG3KK124G152GL5 |
| 1000 | 600 | 0.15      | 32         | 20   | 11  | 27.5 | 5.0            | 135.0        | 21.0                             | 20.0 | 900   | 0.8       |             | FSG3KK154G182GL5 |
| 1000 | 600 | 0.18      | 32         | 22   | 13  | 27.5 | 5.5            | 162.0        | 18.0                             | 20.0 | 900   | 0.8       |             | FSG3KK184G212GL5 |
| 1000 | 600 | 0.22      | 32         | 22   | 13  | 27.5 | 6.0            | 198.0        | 14.0                             | 20.0 | 900   | 0.8       |             | FSG3KK224G212GL5 |
| 1000 | 600 | 0.27      | 32         | 24.5 | 13  | 27.5 | 6.5            | 243.0        | 13.5                             | 20.0 | 900   | 0.8       |             | FSG3KK274G222GL5 |
| 1000 | 600 | 0.33      | 32         | 28   | 14  | 27.5 | 7.0            | 297.0        | 12.0                             | 20.0 | 900   | 0.8       |             | FSG3KK334G262GL5 |
| 1000 | 600 | 0.39      | 32         | 33   | 18  | 27.5 | 7.5            | 351.0        | 11.0                             | 20.0 | 900   | 0.8       |             | FSG3KK394G342GL5 |
| 1000 | 600 | 0.47      | 32         | 33   | 18  | 27.5 | 8.0            | 423.0        | 10.0                             | 20.0 | 900   | 0.8       |             | FSG3KK474G342GL5 |
| 1000 | 600 | 0.56      | 32         | 37   | 22  | 27.5 | 8.5            | 504.0        | 9.0                              | 20.0 | 900   | 1.0       |             | FSG3KK564G402GL5 |
| 1000 | 600 | 0.68      | 32         | 37   | 22  | 27.5 | 9.5            | 612.0        | 8.0                              | 20.0 | 900   | 1.0       |             | FSG3KK684G402GL5 |
| 1000 | 600 | 0.18      | 42         | 22   | 11  | 37.5 | 6.0            | 90.0         | 18.0                             | 25.0 | 500   | 1.0       |             | FSG3KK184K852KL5 |
| 1000 | 600 | 0.22      | 42         | 22   | 11  | 37.5 | 6.5            | 110.0        | 14.0                             | 25.0 | 500   | 1.0       |             | FSG3KK224K852KL5 |
| 1000 | 600 | 0.27      | 42         | 24   | 13  | 37.5 | 6.8            | 135.0        | 13.0                             | 25.0 | 500   | 1.0       |             | FSG3KK274K112KL5 |
| 1000 | 600 | 0.33      | 42         | 24   | 13  | 37.5 | 7.2            | 165.0        | 12.0                             | 25.0 | 500   | 1.0       |             | FSG3KK334K112KL5 |
| 1000 | 600 | 0.39      | 42         | 28   | 17  | 37.5 | 7.4            | 195.0        | 11.5                             | 25.0 | 500   | 1.0       |             | FSG3KK394K172KL5 |
| 1000 | 600 | 0.47      | 42         | 28   | 17  | 37.5 | 7.6            | 235.0        | 11.0                             | 25.0 | 500   | 1.0       |             | FSG3KK474K172KL5 |
| 1000 | 600 | 0.56      | 42         | 28   | 17  | 37.5 | 8.0            | 280.0        | 10.5                             | 25.0 | 500   | 1.0       |             | FSG3KK564K172KL5 |
| 1000 | 600 | 0.68      | 42         | 32   | 19  | 37.5 | 8.5            | 340.0        | 10.0                             | 25.0 | 500   | 1.0       |             | FSG3KK684K212KL5 |
| 1000 | 600 | 0.82      | 42         | 40   | 20  | 37.5 | 10.0           | 410.0        | 9.0                              | 25.0 | 500   | 1.0       |             | FSG3KK824K242KL5 |
| 1000 | 600 | 1.0       | 42         | 40   | 20  | 37.5 | 11.0           | 500.0        | 7.0                              | 25.0 | 500   | 1.0       |             | FSG3KK105K242KL5 |
| 1000 | 600 | 1.2       | 42         | 44   | 24  | 37.5 | 12.0           | 600.0        | 6.5                              | 25.0 | 500   | 1.0       |             | FSG3KK125K322KL5 |
| 1000 | 600 | 1.5       | 42         | 44   | 24  | 37.5 | 13.0           | 750.0        | 6.0                              | 25.0 | 500   | 1.0       |             | FSG3KK155K322KL5 |
| 1000 | 600 | 1.8       | 42         | 45   | 30  | 37.5 | 15.0           | 900.0        | 5.0                              | 25.0 | 500   | 1.0       |             | FSG3KK185K422KL5 |
| 1000 | 600 | 2.2       | 42         | 45   | 30  | 37.5 | 16.0           | 1100.0       | 4.0                              | 25.0 | 500   | 1.0       |             | FSG3KK225K422KL5 |
| 1600 | 650 | 0.0033    | 18         | 11   | 5   | 15   | 1.1            | 19.8         | 190.0                            | 12.0 | 6000  | 0.8       |             | FSG3WK332E142EL5 |
| 1600 | 650 | 0.0047    | 18         | 11   | 5   | 15   | 1.3            | 28.2         | 165.0                            | 12.0 | 6000  | 0.8       |             | FSG3WK472E142EL5 |
| 1600 | 650 | 0.0056    | 18         | 11   | 5   | 15   | 1.4            | 33.6         | 120.0                            | 12.0 | 6000  | 0.8       |             | FSG3WK562E142EL5 |
| 1600 | 650 | 0.0068    | 18         | 11   | 5   | 15   | 1.6            | 40.8         | 100.0                            | 12.0 | 6000  | 0.8       |             | FSG3WK682E142EL5 |
| 1600 | 650 | 0.0082    | 18         | 11   | 5   | 15   | 1.8            | 49.2         | 95.0                             | 12.0 | 6000  | 0.8       |             | FSG3WK822E142EL5 |
| 1600 | 650 | 0.01      | 18         | 11   | 5   | 15   | 2.0            | 60.0         | 65.0                             | 12.0 | 6000  | 0.8       |             | FSG3WK103E142EL5 |
| 1600 | 650 | 0.012     | 18         | 12   | 6   | 15   | 2.3            | 72.0         | 50.0                             | 12.0 | 6000  | 0.8       |             | FSG3WK123E172EL5 |
| 1600 | 650 | 0.015     | 18         | 12   | 6   | 15   | 2.5            | 90.0         | 45.0                             | 12.0 | 6000  | 0.8       |             | FSG3WK153E172EL5 |
| 1600 | 650 | 0.018     | 18         | 13.5 | 7.5 | 15   | 3.0            | 108.0        | 35.0                             | 12.0 | 6000  | 0.8       |             | FSG3WK183E292EL5 |
| 1600 | 650 | 0.022     | 18         | 13.5 | 7.5 | 15   | 3.2            | 132.0        | 30.0                             | 12.0 | 6000  | 0.8       |             | FSG3WK223E292EL5 |
| 1600 | 650 | 0.027     | 18         | 14.5 | 8.5 | 15   | 3.8            | 162.0        | 25.0                             | 12.0 | 6000  | 0.8       |             | FSG3WK273E342EL5 |
| 1600 | 650 | 0.033     | 18         | 14.5 | 8.5 | 15   | 4.0            | 198.0        | 20.0                             | 12.0 | 6000  | 0.8       |             | FSG3WK333E342EL5 |

## Rating and Part Number

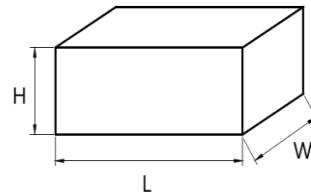
| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|      |     | μF        | mm         | mm   | mm  | mm   | 70°C A         | mΩ           | nH                               | V/us | mm    | mm        |                  |
| 1600 | 650 | 0.015     | 26         | 15.5 | 6   | 22.5 | 2.8            | 45.0         | 40.0                             | 15.0 | 3000  | 0.8       | FSG3WK153F142FL5 |
| 1600 | 650 | 0.022     | 26         | 15.5 | 6   | 22.5 | 3.5            | 66.0         | 30.0                             | 15.0 | 3000  | 0.8       | FSG3WK223F142FL5 |
| 1600 | 650 | 0.033     | 26         | 15.5 | 6   | 22.5 | 4.0            | 99.0         | 20.0                             | 15.0 | 3000  | 0.8       | FSG3WK333F142FL5 |
| 1600 | 650 | 0.039     | 26         | 16.5 | 7   | 22.5 | 4.8            | 117.0        | 16.0                             | 15.0 | 3000  | 0.8       | FSG3WK393F172FL5 |
| 1600 | 650 | 0.047     | 26         | 16.5 | 7   | 22.5 | 5.2            | 141.0        | 15.0                             | 15.0 | 3000  | 0.8       | FSG3WK473F172FL5 |
| 1600 | 650 | 0.056     | 26         | 17   | 8.5 | 22.5 | 5.4            | 168.0        | 14.0                             | 15.0 | 3000  | 0.8       | FSG3WK563F202FL5 |
| 1600 | 650 | 0.068     | 26         | 19   | 10  | 22.5 | 5.8            | 204.0        | 13.0                             | 15.0 | 3000  | 0.8       | FSG3WK683F242FL5 |
| 1600 | 650 | 0.082     | 26         | 19   | 10  | 22.5 | 6.0            | 246.0        | 12.0                             | 15.0 | 3000  | 0.8       | FSG3WK823F242FL5 |
| 1600 | 650 | 0.1       | 26         | 20   | 11  | 22.5 | 6.5            | 300.0        | 11.0                             | 15.0 | 3000  | 0.8       | FSG3WK104F262FL5 |
| 1600 | 650 | 0.039     | 32         | 17   | 8   | 27.5 | 3.8            | 78.0         | 30.0                             | 20.0 | 2000  | 0.8       | FSG3WK393G142GL5 |
| 1600 | 650 | 0.047     | 32         | 17   | 8   | 27.5 | 4.0            | 94.0         | 29.0                             | 20.0 | 2000  | 0.8       | FSG3WK473G142GL5 |
| 1600 | 650 | 0.056     | 32         | 17   | 8   | 27.5 | 4.5            | 112.0        | 28.0                             | 20.0 | 2000  | 0.8       | FSG3WK563G142GL5 |
| 1600 | 650 | 0.068     | 32         | 18   | 9   | 27.5 | 5.0            | 136.0        | 24.0                             | 20.0 | 2000  | 0.8       | FSG3WK683G152GL5 |
| 1600 | 650 | 0.082     | 32         | 20   | 11  | 27.5 | 5.5            | 164.0        | 20.0                             | 20.0 | 2000  | 0.8       | FSG3WK823G182GL5 |
| 1600 | 650 | 0.1       | 32         | 22   | 13  | 27.5 | 6.0            | 200.0        | 18.0                             | 20.0 | 2000  | 0.8       | FSG3WK104G212GL5 |
| 1600 | 650 | 0.12      | 32         | 22   | 13  | 27.5 | 6.5            | 240.0        | 16.0                             | 20.0 | 2000  | 0.8       | FSG3WK124G212GL5 |
| 1600 | 650 | 0.15      | 32         | 24.5 | 13  | 27.5 | 7.0            | 300.0        | 14.0                             | 20.0 | 2000  | 0.8       | FSG3WK154G222GL5 |
| 1600 | 650 | 0.18      | 32         | 28   | 14  | 27.5 | 7.5            | 360.0        | 12.0                             | 20.0 | 2000  | 0.8       | FSG3WK184G262GL5 |
| 1600 | 650 | 0.22      | 32         | 33   | 18  | 27.5 | 8.5            | 440.0        | 10.0                             | 20.0 | 2000  | 0.8       | FSG3WK224G342GL5 |
| 1600 | 650 | 0.27      | 32         | 33   | 18  | 27.5 | 9.0            | 540.0        | 9.5                              | 20.0 | 2000  | 0.8       | FSG3WK274G342GL5 |
| 1600 | 650 | 0.33      | 32         | 33   | 18  | 27.5 | 10.0           | 660.0        | 8.0                              | 20.0 | 2000  | 0.8       | FSG3WK334G342GL5 |
| 1600 | 650 | 0.39      | 32         | 37   | 22  | 27.5 | 11.0           | 780.0        | 7.0                              | 20.0 | 2000  | 1.0       | FSG3WK394G402GL5 |
| 1600 | 650 | 0.47      | 32         | 37   | 22  | 27.5 | 12.0           | 940.0        | 6.0                              | 20.0 | 2000  | 1.0       | FSG3WK474G402GL5 |
| 1600 | 650 | 0.082     | 42         | 22   | 11  | 37.5 | 4.8            | 98.4         | 28.0                             | 25.0 | 1200  | 1.0       | FSG3WK823K852KL5 |
| 1600 | 650 | 0.1       | 42         | 22   | 11  | 37.5 | 5.0            | 120.0        | 24.0                             | 25.0 | 1200  | 1.0       | FSG3WK104K852KL5 |
| 1600 | 650 | 0.12      | 42         | 22   | 11  | 37.5 | 5.5            | 144.0        | 22.0                             | 25.0 | 1200  | 1.0       | FSG3WK124K852KL5 |
| 1600 | 650 | 0.15      | 42         | 22   | 11  | 37.5 | 5.8            | 180.0        | 20.0                             | 25.0 | 1200  | 1.0       | FSG3WK154K852KL5 |
| 1600 | 650 | 0.18      | 42         | 24   | 13  | 37.5 | 6.0            | 216.0        | 18.0                             | 25.0 | 1200  | 1.0       | FSG3WK184K112KL5 |
| 1600 | 650 | 0.22      | 42         | 24   | 13  | 37.5 | 6.2            | 264.0        | 17.0                             | 25.0 | 1200  | 1.0       | FSG3WK224K112KL5 |
| 1600 | 650 | 0.27      | 42         | 24   | 13  | 37.5 | 6.5            | 324.0        | 15.0                             | 25.0 | 1200  | 1.0       | FSG3WK274K112KL5 |
| 1600 | 650 | 0.33      | 42         | 28.5 | 16  | 37.5 | 6.8            | 396.0        | 14.0                             | 25.0 | 1200  | 1.0       | FSG3WK334K862KL5 |
| 1600 | 650 | 0.39      | 42         | 28.5 | 16  | 37.5 | 7.5            | 468.0        | 12.5                             | 25.0 | 1200  | 1.0       | FSG3WK394K862KL5 |
| 1600 | 650 | 0.47      | 42         | 32   | 19  | 37.5 | 8.0            | 564.0        | 12.0                             | 25.0 | 1200  | 1.0       | FSG3WK474K212KL5 |
| 1600 | 650 | 0.56      | 42         | 40   | 20  | 37.5 | 9.0            | 672.0        | 11.0                             | 25.0 | 1200  | 1.0       | FSG3WK564K242KL5 |
| 1600 | 650 | 0.68      | 42         | 40   | 20  | 37.5 | 9.5            | 816.0        | 10.5                             | 25.0 | 1200  | 1.0       | FSG3WK684K242KL5 |
| 1600 | 650 | 0.82      | 42         | 44   | 24  | 37.5 | 10.5           | 984.0        | 9.0                              | 25.0 | 1200  | 1.0       | FSG3WK824K322KL5 |
| 1600 | 650 | 1         | 42         | 44   | 24  | 37.5 | 12.0           | 1200.0       | 7.5                              | 25.0 | 1200  | 1.0       | FSG3WK105K322KL5 |
| 1600 | 650 | 1.2       | 42         | 45   | 30  | 37.5 | 14.0           | 1440.0       | 6.0                              | 25.0 | 1200  | 1.0       | FSG3WK125K422KL5 |
| 2000 | 700 | 0.001     | 18         | 11   | 5   | 15   | 0.5            | 9.5          | 630.0                            | 12.0 | 9500  | 0.8       | FSG3DK102E142EL5 |
| 2000 | 700 | 0.0012    | 18         | 11   | 5   | 15   | 0.6            | 11.4         | 500.0                            | 12.0 | 9500  | 0.8       | FSG3DK122E142EL5 |
| 2000 | 700 | 0.0015    | 18         | 11   | 5   | 15   | 0.7            | 14.3         | 420.0                            | 12.0 | 9500  | 0.8       | FSG3DK152E142EL5 |
| 2000 | 700 | 0.0018    | 18         | 11   | 5   | 15   | 0.8            | 17.1         | 350.0                            | 12.0 | 9500  | 0.8       | FSG3DK182E142EL5 |
| 2000 | 700 | 0.0022    | 18         | 11   | 5   | 15   | 0.9            | 20.9         | 300.0                            | 12.0 | 9500  | 0.8       | FSG3DK222E142EL5 |
| 2000 | 700 | 0.0027    | 18         | 11   | 5   | 15   | 1.0            | 25.7         | 240.0                            | 12.0 | 9500  | 0.8       | FSG3DK272E142EL5 |
| 2000 | 700 | 0.0033    | 18         | 11   | 5   | 15   | 1.2            | 31.4         | 190.0                            | 12.0 | 9500  | 0.8       | FSG3DK332E142EL5 |
| 2000 | 700 | 0.0039    | 18         | 11   | 5   | 15   | 1.3            | 37.1         | 165.0                            | 12.0 | 9500  | 0.8       | FSG3DK392E142EL5 |
| 2000 | 700 | 0.0047    | 18         | 11   | 5   | 15   | 1.4            | 44.7         | 135.0                            | 12.0 | 9500  | 0.8       | FSG3DK472E142EL5 |
| 2000 | 700 | 0.0056    | 18         | 12   | 6   | 15   | 1.6            | 53.2         | 110.0                            | 12.0 | 9500  | 0.8       | FSG3DK562E172EL5 |
| 2000 | 700 | 0.0068    | 18         | 12   | 6   | 15   | 1.8            | 64.6         | 95.0                             | 12.0 | 9500  | 0.8       | FSG3DK682E172EL5 |
| 2000 | 700 | 0.0082    | 18         | 12   | 6   | 15   | 2.0            | 77.9         | 80.0                             | 12.0 | 9500  | 0.8       | FSG3DK822E172EL5 |
| 2000 | 700 | 0.01      | 18         | 13.5 | 7.5 | 15   | 2.5            | 95.0         | 65.0                             | 12.0 | 9500  | 0.8       | FSG3DK103E292EL5 |
| 2000 | 700 | 0.012     | 18         | 14.5 | 8.5 | 15   | 2.8            | 114.0        | 50.0                             | 12.0 | 9500  | 0.8       | FSG3DK123E342EL5 |
| 2000 | 700 | 0.015     | 18         | 14.5 | 8.5 | 15   | 3.0            | 142.5        | 45.0                             | 12.0 | 9500  | 0.8       | FSG3DK153E342EL5 |
| 2000 | 700 | 0.018     | 18         | 16   | 10  | 15   | 3.8            | 171.0        | 35.0                             | 12.0 | 9500  | 0.8       | FSG3DK183E432EL5 |
| 2000 | 700 | 0.001     | 26         | 15.5 | 6   | 22.5 | 0.6            | 4.5          | 550.0                            | 15.0 | 4500  | 0.8       | FSG3DK102F142FL5 |
| 2000 | 700 | 0.0012    | 26         | 15.5 | 6   | 22.5 | 0.7            | 5.4          | 450.0                            | 15.0 | 4500  | 0.8       | FSG3DK122F142FL5 |

## Rating and Part Number

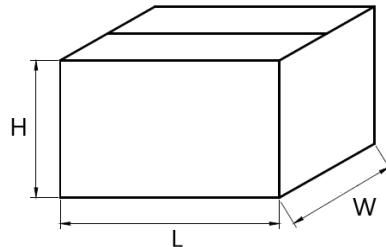
| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|      |     | μF        | mm         | mm   | mm  | mm   | mm             | 70°C A       | A                                | mΩ   | nH    | V/us      | mm               |
| 2000 | 700 | 0.0015    | 26         | 15.5 | 6   | 22.5 | 0.8            | 6.8          | 360.0                            | 15.0 | 4500  | 0.8       | FSG3DK152F142FL5 |
| 2000 | 700 | 0.0018    | 26         | 15.5 | 6   | 22.5 | 0.9            | 8.1          | 300.0                            | 15.0 | 4500  | 0.8       | FSG3DK182F142FL5 |
| 2000 | 700 | 0.0022    | 26         | 15.5 | 6   | 22.5 | 1.0            | 9.9          | 250.0                            | 15.0 | 4500  | 0.8       | FSG3DK222F142FL5 |
| 2000 | 700 | 0.0027    | 26         | 15.5 | 6   | 22.5 | 1.2            | 12.2         | 230.0                            | 15.0 | 4500  | 0.8       | FSG3DK272F142FL5 |
| 2000 | 700 | 0.0033    | 26         | 15.5 | 6   | 22.5 | 1.2            | 14.9         | 200.0                            | 15.0 | 4500  | 0.8       | FSG3DK332F142FL5 |
| 2000 | 700 | 0.0039    | 26         | 15.5 | 6   | 22.5 | 1.4            | 17.6         | 180.0                            | 15.0 | 4500  | 0.8       | FSG3DK392F142FL5 |
| 2000 | 700 | 0.0047    | 26         | 15.5 | 6   | 22.5 | 1.6            | 21.2         | 140.0                            | 15.0 | 4500  | 0.8       | FSG3DK472F142FL5 |
| 2000 | 700 | 0.0056    | 26         | 15.5 | 6   | 22.5 | 1.8            | 25.2         | 120.0                            | 15.0 | 4500  | 0.8       | FSG3DK562F142FL5 |
| 2000 | 700 | 0.0068    | 26         | 15.5 | 6   | 22.5 | 2.0            | 30.6         | 95.0                             | 15.0 | 4500  | 0.8       | FSG3DK682F142FL5 |
| 2000 | 700 | 0.0082    | 26         | 15.5 | 6   | 22.5 | 2.2            | 36.9         | 75.0                             | 15.0 | 4500  | 0.8       | FSG3DK822F142FL5 |
| 2000 | 700 | 0.01      | 26         | 15.5 | 6   | 22.5 | 2.3            | 45.0         | 65.0                             | 15.0 | 4500  | 0.8       | FSG3DK103F142FL5 |
| 2000 | 700 | 0.012     | 26         | 15.5 | 6   | 22.5 | 2.5            | 54.0         | 60.0                             | 15.0 | 4500  | 0.8       | FSG3DK123F142FL5 |
| 2000 | 700 | 0.015     | 26         | 15.5 | 6   | 22.5 | 2.8            | 67.5         | 45.0                             | 15.0 | 4500  | 0.8       | FSG3DK153F142FL5 |
| 2000 | 700 | 0.018     | 26         | 15.5 | 6   | 22.5 | 3.2            | 81.0         | 35.0                             | 15.0 | 4500  | 0.8       | FSG3DK183F142FL5 |
| 2000 | 700 | 0.022     | 26         | 16.5 | 7   | 22.5 | 4.0            | 99.0         | 26.0                             | 15.0 | 4500  | 0.8       | FSG3DK223F172FL5 |
| 2000 | 700 | 0.027     | 26         | 16.5 | 7   | 22.5 | 4.5            | 121.5        | 20.0                             | 15.0 | 4500  | 0.8       | FSG3DK273F172FL5 |
| 2000 | 700 | 0.033     | 26         | 17   | 8.5 | 22.5 | 5.2            | 148.5        | 18.0                             | 15.0 | 4500  | 0.8       | FSG3DK333F202FL5 |
| 2000 | 700 | 0.039     | 26         | 19   | 10  | 22.5 | 5.8            | 175.5        | 15.0                             | 15.0 | 4500  | 0.8       | FSG3DK393F242FL5 |
| 2000 | 700 | 0.047     | 26         | 19   | 10  | 22.5 | 6.0            | 211.5        | 13.0                             | 15.0 | 4500  | 0.8       | FSG3DK473F242FL5 |
| 2000 | 700 | 0.056     | 26         | 20   | 11  | 22.5 | 6.5            | 252.0        | 12.0                             | 15.0 | 4500  | 0.8       | FSG3DK563F262FL5 |
| 2000 | 700 | 0.022     | 32         | 17   | 8   | 27.5 | 3.0            | 55.0         | 45.0                             | 20.0 | 2500  | 0.8       | FSG3DK223G142GL5 |
| 2000 | 700 | 0.027     | 32         | 17   | 8   | 27.5 | 3.5            | 67.5         | 40.0                             | 20.0 | 2500  | 0.8       | FSG3DK273G142GL5 |
| 2000 | 700 | 0.033     | 32         | 18   | 9   | 27.5 | 4.0            | 82.5         | 35.0                             | 20.0 | 2500  | 0.8       | FSG3DK333G152GL5 |
| 2000 | 700 | 0.039     | 32         | 20   | 11  | 27.5 | 4.5            | 97.5         | 28.0                             | 20.0 | 2500  | 0.8       | FSG3DK393G182GL5 |
| 2000 | 700 | 0.047     | 32         | 20   | 11  | 27.5 | 4.8            | 117.5        | 25.0                             | 20.0 | 2500  | 0.8       | FSG3DK473G182GL5 |
| 2000 | 700 | 0.056     | 32         | 22   | 13  | 27.5 | 5.0            | 140.0        | 24.0                             | 20.0 | 2500  | 0.8       | FSG3DK563G212GL5 |
| 2000 | 700 | 0.068     | 32         | 22   | 13  | 27.5 | 5.5            | 170.0        | 22.0                             | 20.0 | 2500  | 0.8       | FSG3DK683G212GL5 |
| 2000 | 700 | 0.082     | 32         | 24.5 | 13  | 27.5 | 6.0            | 205.0        | 20.0                             | 20.0 | 2500  | 0.8       | FSG3DK823G222GL5 |
| 2000 | 700 | 0.1       | 32         | 28   | 14  | 27.5 | 6.5            | 250.0        | 18.0                             | 20.0 | 2500  | 0.8       | FSG3DK104G262GL5 |
| 2000 | 700 | 0.12      | 32         | 33   | 18  | 27.5 | 7.0            | 300.0        | 16.0                             | 20.0 | 2500  | 0.8       | FSG3DK124G342GL5 |
| 2000 | 700 | 0.15      | 32         | 33   | 18  | 27.5 | 7.5            | 375.0        | 14.0                             | 20.0 | 2500  | 0.8       | FSG3DK154G342GL5 |
| 2000 | 700 | 0.18      | 32         | 37   | 22  | 27.5 | 8.0            | 450.0        | 12.0                             | 20.0 | 2500  | 1.0       | FSG3DK184G402GL5 |
| 2000 | 700 | 0.22      | 32         | 37   | 22  | 27.5 | 8.5            | 550.0        | 10.0                             | 20.0 | 2500  | 1.0       | FSG3DK224G402GL5 |
| 2000 | 700 | 0.033     | 42         | 22   | 11  | 37.5 | 4.0            | 49.5         | 35.0                             | 25.0 | 1500  | 1.0       | FSG3DK333K852KL5 |
| 2000 | 700 | 0.039     | 42         | 22   | 11  | 37.5 | 4.5            | 58.5         | 28.0                             | 25.0 | 1500  | 1.0       | FSG3DK393K852KL5 |
| 2000 | 700 | 0.047     | 42         | 22   | 11  | 37.5 | 4.8            | 70.5         | 26.0                             | 25.0 | 1500  | 1.0       | FSG3DK473K852KL5 |
| 2000 | 700 | 0.056     | 42         | 22   | 11  | 37.5 | 5.0            | 84.0         | 24.0                             | 25.0 | 1500  | 1.0       | FSG3DK563K852KL5 |
| 2000 | 700 | 0.068     | 42         | 22   | 11  | 37.5 | 5.4            | 102.0        | 23.0                             | 25.0 | 1500  | 1.0       | FSG3DK683K852KL5 |
| 2000 | 700 | 0.082     | 42         | 22   | 11  | 37.5 | 5.8            | 123.0        | 22.0                             | 25.0 | 1500  | 1.0       | FSG3DK823K852KL5 |
| 2000 | 700 | 0.1       | 42         | 24   | 13  | 37.5 | 6.5            | 150.0        | 18.0                             | 25.0 | 1500  | 1.0       | FSG3DK104K112KL5 |
| 2000 | 700 | 0.12      | 42         | 24   | 13  | 37.5 | 7.0            | 180.0        | 16.0                             | 25.0 | 1500  | 1.0       | FSG3DK124K112KL5 |
| 2000 | 700 | 0.15      | 42         | 28.5 | 16  | 37.5 | 7.5            | 225.0        | 15.0                             | 25.0 | 1500  | 1.0       | FSG3DK154K862KL5 |
| 2000 | 700 | 0.18      | 42         | 28.5 | 16  | 37.5 | 8.0            | 270.0        | 14.0                             | 25.0 | 1500  | 1.0       | FSG3DK184K862KL5 |
| 2000 | 700 | 0.22      | 42         | 32   | 19  | 37.5 | 8.5            | 330.0        | 12.0                             | 25.0 | 1500  | 1.0       | FSG3DK224K212KL5 |
| 2000 | 700 | 0.27      | 42         | 40   | 20  | 37.5 | 9.0            | 405.0        | 11.0                             | 25.0 | 1500  | 1.0       | FSG3DK274K242KL5 |
| 2000 | 700 | 0.33      | 42         | 40   | 20  | 37.5 | 9.5            | 495.0        | 10.5                             | 25.0 | 1500  | 1.0       | FSG3DK334K242KL5 |
| 2000 | 700 | 0.39      | 42         | 44   | 24  | 37.5 | 10.0           | 585.0        | 9.5                              | 25.0 | 1500  | 1.0       | FSG3DK394K322KL5 |
| 2000 | 700 | 0.47      | 42         | 44   | 24  | 37.5 | 10.5           | 705.0        | 9.0                              | 25.0 | 1500  | 1.0       | FSG3DK474K322KL5 |
| 2000 | 700 | 0.56      | 42         | 45   | 30  | 37.5 | 12.0           | 840.0        | 7.5                              | 25.0 | 1500  | 1.0       | FSG3DK564K422KL5 |
| 2000 | 700 | 0.68      | 42         | 45   | 30  | 37.5 | 14.0           | 1020.0       | 6.0                              | 25.0 | 1500  | 1.0       | FSG3DK684K422KL5 |

## Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 35     |



## Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 10    | C13       | 13        | 11   | 5   | 1,200              | 1,488       | 680       |
|       | C16       | 13        | 12   | 6   | 1,200              | 1,224       | 560       |
|       | C24       | 13        | 13   | 7   | 1,200              | 1,056       | 480       |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F14       | 26        | 15.5 | 6   | 612                | 612         | 350       |
|       | F17       | 26        | 16.5 | 7   | 528                | 528         | 300       |
|       | F20       | 26        | 17   | 8.5 | 432                | 432         | 250       |
|       | F24       | 26        | 19   | 10  | 372                | 372         | 210       |
|       | F26       | 26        | 20   | 11  | 336                | 336         | 190       |
|       | F27       | 26        | 22   | 12  | 300                | 300         | 170       |
| 27.5  | G14       | 32        | 17   | 8   | 380                | 380         |           |
|       | G15       | 32        | 18   | 9   | 340                | 340         |           |
|       | G18       | 32        | 20   | 11  | 280                | 280         |           |
|       | G21       | 32        | 22   | 13  | 230                | 230         |           |
|       | G22       | 32        | 24.5 | 13  | 230                | 230         |           |
|       | G26       | 32        | 28   | 14  | 220                | 220         |           |
|       | G34       | 32        | 33   | 18  | 170                | 170         |           |
|       | G40       | 32        | 37   | 22  | 140                | 140         |           |
| 37.5  | K11       | 42        | 24   | 13  | 161                | 161         |           |
|       | K17       | 42        | 28   | 17  | 126                | 126         |           |
|       | K21       | 42        | 32   | 19  | 112                | 112         |           |
|       | K24       | 42        | 40   | 20  | 105                | 105         |           |
|       | K32       | 42        | 44   | 24  | 91                 | 91          |           |
|       | K42       | 42        | 45   | 30  | 70                 | 70          |           |
|       | K47       | 42        | 50   | 35  | 63                 | 63          |           |
|       | K85       | 42        | 22   | 11  | 196                | 196         |           |
|       | K86       | 42        | 28.5 | 16  | 133                | 133         |           |

## Overview

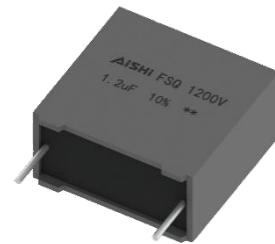
The FSQ capacitor is constructed of metallized polypropylene film with double-sided metallized film encapsulated with epoxy resin in a plastic box, with 2 or 4 tinned copper wires. The FSQ series is suitable for harsh environmental conditions and qualify in accordance to AEC-Q200D requirement.

## Applications

Widely used in high voltage, high frequency circuit, snubber and SCR commutating circuits. Specially design for OBC and automotive applications.

## Features

- High ripple current
- Self-healing property
- Low losses
- Small inherent temperature rise
- High contact reliability
- Operating temperature range: - 40°C to 105°C
- Suitable for harsh environmental conditions
- THB Grade IIIB (85°C, 85% RH, 1000h at U<sub>NDC</sub>)
- Automotive Grade (AEC-Q200D)



## Qualification

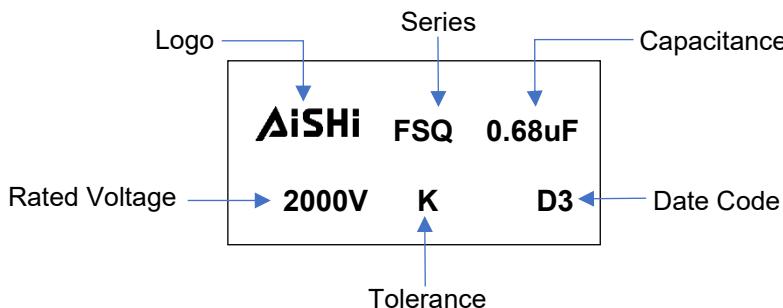
|                    |                                |
|--------------------|--------------------------------|
| Reference Standard | IEC 61071, EN 61071, AEC-Q200D |
| Climate Category   | 40/105/56 IEC 60068-1          |



## General Technical Data

|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film   |
| Voltage Range               | 630Vdc to 2000Vdc   |
| Capacitance Range           | 0.001µF to 4.7µF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C  |
| Operating Temperature Range | -55°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)   |
| Climatic Category           | 55/105/56 IEC 60068-1   |
| Dissipation Factor          | 0.0010 (0.1%) at 25°C, 1KHz   |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 100 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 30 000 s |

## Marking



## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Part Number System

| F              | SQ  | 3D   | K                   | 684   | K42                      | 2KL                          | 5                               |
|----------------|---|--|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series  | Voltage (VDC)                                      | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | Snubber, pulse Capacitor, AEC-Q200, Double-sided Metallized PP Film | 630=2L<br>1000=3K<br>1200=3B<br>1600=3W<br>2000=3D | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

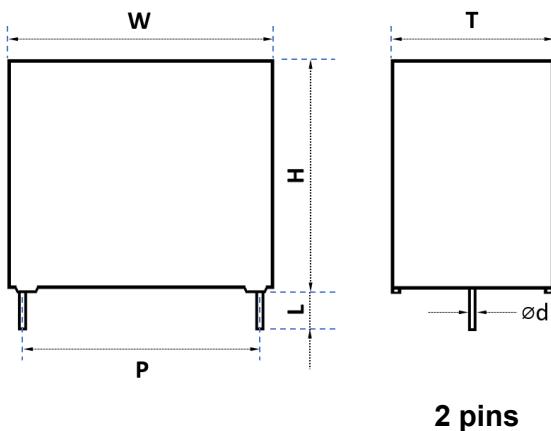
## Terminal Code

| Digit One (Lead/Terminal Type) |   | Digit Two (Lead Space) |   | Digit Three (Lead Ipsilateral) |   |
|--------------------------------|---|------------------------|---|--------------------------------|---|
| 2 leads for long               | L | 15.0mm                 | E | 10.2mm                         | B |
| 2 leads for straight cut       | 2 | 22.5mm                 | F | 12.7mm                         | G |
| 2 leads for forming cut        | E | 27.5mm                 | G | 20.3mm                         | D |
| 4 leads for straight cut       | 4 | 37.5mm                 | K | N/A                            | L |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| 20.0mm min  | L |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |     |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|-----|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T   | Tolerance | P     | Tolerance | Ød        | Tolerance |
| C13       | 13        | 0.5       | 11   | 0.5       | 5   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C16       | 13        | 0.5       | 12   | 0.5       | 6   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C24       | 13        | 0.5       | 13   | 0.5       | 7   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| E14       | 18        | 0.5       | 11   | 0.5       | 5   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E17       | 18        | 0.5       | 12   | 0.5       | 6   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E29       | 18        | 0.5       | 13.5 | 0.5       | 7.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E34       | 18        | 0.5       | 14.5 | 0.5       | 8.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E43       | 18        | 0.5       | 16   | 0.5       | 10  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E47       | 18        | 0.5       | 19   | 0.5       | 11  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| F14       | 26        | 0.5       | 15.5 | 0.5       | 6   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F17       | 26        | 0.5       | 16.5 | 0.5       | 7   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F20       | 26        | 0.5       | 17   | 0.5       | 8.5 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F24       | 26        | 0.5       | 19   | 0.5       | 10  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F26       | 26        | 0.5       | 20   | 0.5       | 11  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F27       | 26        | 0.5       | 22   | 0.5       | 12  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| G14       | 32        | 0.8       | 17   | 0.8       | 8   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G15       | 32        | 0.8       | 18   | 0.8       | 9   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G22       | 32        | 0.8       | 24.5 | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22  | 0.8       | 27.5  | 0.5       | 1.0       | 0.05      |
| K11       | 42        | 1.0       | 24   | 1.0       | 13  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K17       | 42        | 1.0       | 28   | 1.0       | 17  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K21       | 42        | 1.0       | 32   | 1.0       | 19  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K24       | 42        | 1.0       | 40   | 1.0       | 20  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K32       | 42        | 1.0       | 44   | 1.0       | 24  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K42       | 42        | 1.0       | 45   | 1.0       | 30  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K47       | 42        | 1.0       | 50   | 1.0       | 35  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K85       | 42        | 1.0       | 22   | 1.0       | 11  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K86       | 42        | 1.0       | 28.5 | 1.0       | 16  | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |

# Double Metallized Polypropylene Film Pulse Capacitors

## FSQ Series - 630 ~ 2000VDC (Automotive Grade)



### Rating and Part Number

| Vdc  | Vac | Cap Value | Dimensions |         |         |         | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|---------|---------|---------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |                |              |                                  |      |       |           |                  |
| 630  | 400 | 0.01      | 18         | 11      | 5       | 15      | 1.8            | 30.0         | 62.0                             | 12.0 | 3000  | 0.8       | FSQ2LK103E142EL5 |
| 630  | 400 | 0.012     | 18         | 11      | 5       | 15      | 2.2            | 36.0         | 52.0                             | 12.0 | 3000  | 0.8       | FSQ2LK123E142EL5 |
| 630  | 400 | 0.015     | 18         | 11      | 5       | 15      | 2.5            | 45.0         | 42.0                             | 12.0 | 3000  | 0.8       | FSQ2LK153E142EL5 |
| 630  | 400 | 0.018     | 18         | 11      | 5       | 15      | 2.7            | 54.0         | 35.0                             | 12.0 | 3000  | 0.8       | FSQ2LK183E142EL5 |
| 630  | 400 | 0.02      | 18         | 11      | 5       | 15      | 2.8            | 60.0         | 32.0                             | 12.0 | 3000  | 0.8       | FSQ2LK203E142EL5 |
| 630  | 400 | 0.022     | 18         | 11      | 5       | 15      | 2.9            | 66.0         | 30.0                             | 12.0 | 3000  | 0.8       | FSQ2LK223E142EL5 |
| 630  | 400 | 0.027     | 18         | 12      | 6       | 15      | 3.2            | 81.0         | 25.0                             | 12.0 | 3000  | 0.8       | FSQ2LK273E172EL5 |
| 630  | 400 | 0.033     | 18         | 12      | 6       | 15      | 3.7            | 99.0         | 20.0                             | 12.0 | 3000  | 0.8       | FSQ2LK333E172EL5 |
| 630  | 400 | 0.039     | 18         | 12      | 6       | 15      | 3.9            | 117.0        | 16.0                             | 12.0 | 3000  | 0.8       | FSQ2LK393E172EL5 |
| 630  | 400 | 0.047     | 18         | 13.5    | 7.5     | 15      | 4.5            | 141.0        | 15.0                             | 12.0 | 3000  | 0.8       | FSQ2LK473E292EL5 |
| 630  | 400 | 0.056     | 18         | 13.5    | 7.5     | 15      | 4.6            | 168.0        | 14.0                             | 12.0 | 3000  | 0.8       | FSQ2LK563E292EL5 |
| 630  | 400 | 0.068     | 18         | 14.5    | 8.5     | 15      | 4.7            | 204.0        | 13.5                             | 12.0 | 3000  | 0.8       | FSQ2LK683E342EL5 |
| 630  | 400 | 0.082     | 18         | 16      | 10      | 15      | 4.8            | 246.0        | 13.2                             | 12.0 | 3000  | 0.8       | FSQ2LK823E432EL5 |
| 630  | 400 | 0.1       | 18         | 16      | 10      | 15      | 5.0            | 300.0        | 13.0                             | 12.0 | 3000  | 0.8       | FSQ2LK104E432EL5 |
| 630  | 400 | 0.12      | 18         | 19      | 11      | 15      | 5.4            | 360.0        | 12.5                             | 12.0 | 3000  | 0.8       | FSQ2LK124E472EL5 |
| 630  | 400 | 0.047     | 26         | 15.5    | 6       | 22.5    | 3.8            | 70.5         | 20.0                             | 15.0 | 1500  | 0.8       | FSQ2LK473F142FL5 |
| 630  | 400 | 0.056     | 26         | 15.5    | 6       | 22.5    | 4.0            | 84.0         | 19.5                             | 15.0 | 1500  | 0.8       | FSQ2LK563F142FL5 |
| 630  | 400 | 0.068     | 26         | 15.5    | 6       | 22.5    | 4.2            | 102.0        | 19.0                             | 15.0 | 1500  | 0.8       | FSQ2LK683F142FL5 |
| 630  | 400 | 0.082     | 26         | 15.5    | 6       | 22.5    | 4.5            | 123.0        | 18.0                             | 15.0 | 1500  | 0.8       | FSQ2LK823F142FL5 |
| 630  | 400 | 0.1       | 26         | 15.5    | 6       | 22.5    | 5.0            | 150.0        | 16.0                             | 15.0 | 1500  | 0.8       | FSQ2LK104F142FL5 |
| 630  | 400 | 0.12      | 26         | 16.5    | 7       | 22.5    | 5.3            | 180.0        | 14.0                             | 15.0 | 1500  | 0.8       | FSQ2LK124F172FL5 |
| 630  | 400 | 0.15      | 26         | 17      | 8.5     | 22.5    | 6.0            | 225.0        | 11.0                             | 15.0 | 1500  | 0.8       | FSQ2LK154F202FL5 |
| 630  | 400 | 0.18      | 26         | 17      | 8.5     | 22.5    | 6.5            | 270.0        | 10.0                             | 15.0 | 1500  | 0.8       | FSQ2LK184F202FL5 |
| 630  | 400 | 0.22      | 26         | 19      | 10      | 22.5    | 7.5            | 330.0        | 8.5                              | 15.0 | 1500  | 0.8       | FSQ2LK224F242FL5 |
| 630  | 400 | 0.27      | 26         | 20      | 11      | 22.5    | 8.5            | 405.0        | 6.5                              | 15.0 | 1500  | 0.8       | FSQ2LK274F262FL5 |
| 630  | 400 | 0.33      | 26         | 20      | 11      | 22.5    | 9.0            | 495.0        | 6.0                              | 15.0 | 1500  | 0.8       | FSQ2LK334F262FL5 |
| 630  | 400 | 0.39      | 26         | 22      | 12      | 22.5    | 10.0           | 585.0        | 5.0                              | 15.0 | 1500  | 0.8       | FSQ2LK394F272FL5 |
| 630  | 400 | 0.15      | 32         | 17      | 8       | 27.5    | 4.6            | 135.0        | 25.0                             | 20.0 | 900   | 0.8       | FSQ2LK154G142GL5 |
| 630  | 400 | 0.18      | 32         | 17      | 8       | 27.5    | 4.8            | 162.0        | 22.0                             | 20.0 | 900   | 0.8       | FSQ2LK184G142GL5 |
| 630  | 400 | 0.22      | 32         | 18      | 9       | 27.5    | 5.0            | 198.0        | 20.0                             | 20.0 | 900   | 0.8       | FSQ2LK224G152GL5 |
| 630  | 400 | 0.27      | 32         | 20      | 11      | 27.5    | 5.5            | 243.0        | 17.5                             | 20.0 | 900   | 0.8       | FSQ2LK274G182GL5 |
| 630  | 400 | 0.33      | 32         | 20      | 11      | 27.5    | 5.8            | 297.0        | 16.5                             | 20.0 | 900   | 0.8       | FSQ2LK334G182GL5 |
| 630  | 400 | 0.39      | 32         | 20      | 11      | 27.5    | 6.0            | 351.0        | 16.0                             | 20.0 | 900   | 0.8       | FSQ2LK394G182GL5 |
| 630  | 400 | 0.47      | 32         | 22      | 13      | 27.5    | 6.5            | 423.0        | 14.0                             | 20.0 | 900   | 0.8       | FSQ2LK474G212GL5 |
| 630  | 400 | 0.56      | 32         | 22      | 13      | 27.5    | 7.0            | 504.0        | 12.0                             | 20.0 | 900   | 0.8       | FSQ2LK564G212GL5 |
| 630  | 400 | 0.68      | 32         | 24.5    | 13      | 27.5    | 7.5            | 612.0        | 10.5                             | 20.0 | 900   | 0.8       | FSQ2LK684G222GL5 |
| 630  | 400 | 0.82      | 32         | 28      | 14      | 27.5    | 8.5            | 738.0        | 9.0                              | 20.0 | 900   | 0.8       | FSQ2LK824G262GL5 |
| 630  | 400 | 1         | 32         | 33      | 18      | 27.5    | 10.0           | 900.0        | 7.0                              | 20.0 | 900   | 0.8       | FSQ2LK105G342GL5 |
| 630  | 400 | 1.2       | 32         | 33      | 18      | 27.5    | 13.0           | 1080.0       | 6.0                              | 20.0 | 900   | 0.8       | FSQ2LK125G342GL5 |
| 630  | 400 | 1.5       | 32         | 37      | 22      | 27.5    | 15.0           | 1350.0       | 5.0                              | 20.0 | 900   | 1.0       | FSQ2LK155G402GL5 |
| 630  | 400 | 1.8       | 32         | 37      | 22      | 27.5    | 16.0           | 1620.0       | 4.0                              | 20.0 | 900   | 1.0       | FSQ2LK185G402GL5 |
| 630  | 400 | 0.33      | 42         | 22      | 11      | 37.5    | 6.8            | 165.0        | 13.0                             | 25.0 | 500   | 1.0       | FSQ2LK334K852KL5 |
| 630  | 400 | 0.47      | 42         | 22      | 11      | 37.5    | 7.0            | 235.0        | 12.5                             | 25.0 | 500   | 1.0       | FSQ2LK474K852KL5 |
| 630  | 400 | 0.56      | 42         | 22      | 11      | 37.5    | 7.5            | 280.0        | 11.0                             | 25.0 | 500   | 1.0       | FSQ2LK564K852KL5 |
| 630  | 400 | 0.68      | 42         | 22      | 11      | 37.5    | 8.0            | 340.0        | 10.5                             | 25.0 | 500   | 1.0       | FSQ2LK684K852KL5 |
| 630  | 400 | 0.82      | 42         | 28.5    | 16      | 37.5    | 8.0            | 410.0        | 10.5                             | 25.0 | 500   | 1.0       | FSQ2LK824K862KL5 |
| 630  | 400 | 1.0       | 42         | 28.5    | 16      | 37.5    | 8.5            | 500.0        | 10.0                             | 25.0 | 500   | 1.0       | FSQ2LK105K862KL5 |
| 630  | 400 | 1.5       | 42         | 28.5    | 16      | 37.5    | 9.5            | 750.0        | 9.0                              | 25.0 | 500   | 1.0       | FSQ2LK155K862KL5 |
| 630  | 400 | 1.8       | 42         | 32      | 19      | 37.5    | 10.5           | 900.0        | 8.5                              | 25.0 | 500   | 1.0       | FSQ2LK185K212KL5 |
| 630  | 400 | 2.2       | 42         | 40      | 20      | 37.5    | 11.5           | 1100.0       | 8.0                              | 25.0 | 500   | 1.0       | FSQ2LK225K242KL5 |
| 630  | 400 | 2.7       | 42         | 40      | 20      | 37.5    | 13.0           | 1350.0       | 7.0                              | 25.0 | 500   | 1.0       | FSQ2LK275K242KL5 |
| 630  | 400 | 3.3       | 42         | 44      | 24      | 37.5    | 14.0           | 1650.0       | 6.0                              | 25.0 | 500   | 1.0       | FSQ2LK335K322KL5 |
| 630  | 400 | 3.9       | 42         | 45      | 30      | 37.5    | 15.0           | 1950.0       | 5.0                              | 25.0 | 500   | 1.0       | FSQ2LK395K422KL5 |
| 630  | 400 | 4.7       | 42         | 50      | 35      | 37.5    | 16.0           | 2350.0       | 4.0                              | 25.0 | 500   | 1.0       | FSQ2LK475K472KL5 |
| 1000 | 600 | 0.0082    | 18         | 11      | 5       | 15      | 1.5            | 28.7         | 80.0                             | 10.0 | 3500  | 0.8       | FSQ3KK822E142EL5 |
| 1000 | 600 | 0.01      | 18         | 11      | 5       | 15      | 1.8            | 35.0         | 62.0                             | 12.0 | 3500  | 0.8       | FSQ3KK103E142EL5 |

# Double Metallized Polypropylene Film Pulse Capacitors

## FSQ Series - 630 ~ 2000VDC (Automotive Grade)



### Rating and Part Number

| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|      |     | μF        | mm         | mm   | mm  | mm   | 70°C A         | A            | mΩ                               | nH   | V/us  | mm        |                  |
| 1000 | 600 | 0.012     | 18         | 11   | 5   | 15   | 2.2            | 42.0         | 52.0                             | 12.0 | 3500  | 0.8       | FSQ3KK123E142EL5 |
| 1000 | 600 | 0.015     | 18         | 11   | 5   | 15   | 2.5            | 52.5         | 42.0                             | 12.0 | 3500  | 0.8       | FSQ3KK153E142EL5 |
| 1000 | 600 | 0.018     | 18         | 11   | 5   | 15   | 2.7            | 63.0         | 35.0                             | 12.0 | 3500  | 0.8       | FSQ3KK183E142EL5 |
| 1000 | 600 | 0.02      | 18         | 12   | 6   | 15   | 2.8            | 70.0         | 32.0                             | 10.0 | 3500  | 0.8       | FSQ3KK203E172EL5 |
| 1000 | 600 | 0.022     | 18         | 12   | 6   | 15   | 3.0            | 77.0         | 29.0                             | 10.0 | 3500  | 0.8       | FSQ3KK223E172EL5 |
| 1000 | 600 | 0.027     | 18         | 13.5 | 7.5 | 15   | 3.5            | 94.5         | 24.0                             | 12.0 | 3500  | 0.8       | FSQ3KK273E292EL5 |
| 1000 | 600 | 0.033     | 18         | 13.5 | 7.5 | 15   | 4.0            | 115.5        | 19.0                             | 12.0 | 3500  | 0.8       | FSQ3KK333E292EL5 |
| 1000 | 600 | 0.039     | 18         | 14.5 | 8.5 | 15   | 4.5            | 136.5        | 16.0                             | 12.0 | 3500  | 0.8       | FSQ3KK393E342EL5 |
| 1000 | 600 | 0.047     | 18         | 14.5 | 8.5 | 15   | 4.9            | 164.5        | 14.0                             | 12.0 | 3500  | 0.8       | FSQ3KK473E342EL5 |
| 1000 | 600 | 0.027     | 26         | 15.5 | 6   | 22.5 | 3.8            | 56.7         | 24.0                             | 15.0 | 2100  | 0.8       | FSQ3KK273F142FL5 |
| 1000 | 600 | 0.033     | 26         | 15.5 | 6   | 22.5 | 4.3            | 69.3         | 19.0                             | 15.0 | 2100  | 0.8       | FSQ3KK333F142FL5 |
| 1000 | 600 | 0.039     | 26         | 15.5 | 6   | 22.5 | 4.8            | 81.9         | 16.0                             | 15.0 | 2100  | 0.8       | FSQ3KK393F142FL5 |
| 1000 | 600 | 0.047     | 26         | 16.5 | 7   | 22.5 | 5.0            | 98.7         | 15.0                             | 15.0 | 2100  | 0.8       | FSQ3KK473F172FL5 |
| 1000 | 600 | 0.056     | 26         | 16.5 | 7   | 22.5 | 5.4            | 117.6        | 14.5                             | 15.0 | 2100  | 0.8       | FSQ3KK563F172FL5 |
| 1000 | 600 | 0.068     | 26         | 17   | 8.5 | 22.5 | 5.6            | 142.8        | 14.0                             | 15.0 | 2100  | 0.8       | FSQ3KK683F202FL5 |
| 1000 | 600 | 0.082     | 26         | 19   | 10  | 22.5 | 5.8            | 172.2        | 13.5                             | 15.0 | 2100  | 0.8       | FSQ3KK823F242FL5 |
| 1000 | 600 | 0.1       | 26         | 19   | 10  | 22.5 | 6.0            | 210.0        | 13.0                             | 15.0 | 2100  | 0.8       | FSQ3KK104F242FL5 |
| 1000 | 600 | 0.12      | 26         | 20   | 11  | 22.5 | 6.5            | 180.0        | 12.5                             | 15.0 | 1500  | 0.8       | FSQ3KK124F262FL5 |
| 1000 | 600 | 0.15      | 26         | 22   | 12  | 22.5 | 7.0            | 225.0        | 11.0                             | 15.0 | 1500  | 0.8       | FSQ3KK154F272FL5 |
| 1000 | 600 | 0.1       | 32         | 17   | 8   | 27.5 | 4.5            | 90.0         | 25.0                             | 20.0 | 900   | 0.8       | FSQ3KK104G142GL5 |
| 1000 | 600 | 0.12      | 32         | 18   | 9   | 27.5 | 4.8            | 108.0        | 22.0                             | 20.0 | 900   | 0.8       | FSQ3KK124G152GL5 |
| 1000 | 600 | 0.15      | 32         | 20   | 11  | 27.5 | 5.0            | 135.0        | 21.0                             | 20.0 | 900   | 0.8       | FSQ3KK154G182GL5 |
| 1000 | 600 | 0.18      | 32         | 22   | 13  | 27.5 | 5.5            | 162.0        | 18.0                             | 20.0 | 900   | 0.8       | FSQ3KK184G212GL5 |
| 1000 | 600 | 0.22      | 32         | 22   | 13  | 27.5 | 6.0            | 198.0        | 14.0                             | 20.0 | 900   | 0.8       | FSQ3KK224G212GL5 |
| 1000 | 600 | 0.27      | 32         | 24.5 | 13  | 27.5 | 6.5            | 243.0        | 13.5                             | 20.0 | 900   | 0.8       | FSQ3KK274G222GL5 |
| 1000 | 600 | 0.33      | 32         | 28   | 14  | 27.5 | 7.0            | 297.0        | 12.0                             | 20.0 | 900   | 0.8       | FSQ3KK334G262GL5 |
| 1000 | 600 | 0.39      | 32         | 33   | 18  | 27.5 | 7.5            | 351.0        | 11.0                             | 20.0 | 900   | 0.8       | FSQ3KK394G342GL5 |
| 1000 | 600 | 0.47      | 32         | 33   | 18  | 27.5 | 8.0            | 423.0        | 10.0                             | 20.0 | 900   | 0.8       | FSQ3KK474G342GL5 |
| 1000 | 600 | 0.56      | 32         | 37   | 22  | 27.5 | 8.5            | 504.0        | 9.0                              | 20.0 | 900   | 1.0       | FSQ3KK564G402GL5 |
| 1000 | 600 | 0.68      | 32         | 37   | 22  | 27.5 | 9.5            | 612.0        | 8.0                              | 20.0 | 900   | 1.0       | FSQ3KK684G402GL5 |
| 1000 | 600 | 0.18      | 42         | 22   | 11  | 37.5 | 6.0            | 90.0         | 18.0                             | 25.0 | 500   | 1.0       | FSQ3KK184K852KL5 |
| 1000 | 600 | 0.22      | 42         | 22   | 11  | 37.5 | 6.5            | 110.0        | 14.0                             | 25.0 | 500   | 1.0       | FSQ3KK224K852KL5 |
| 1000 | 600 | 0.27      | 42         | 24   | 13  | 37.5 | 6.8            | 135.0        | 13.0                             | 25.0 | 500   | 1.0       | FSQ3KK274K112KL5 |
| 1000 | 600 | 0.33      | 42         | 24   | 13  | 37.5 | 7.2            | 165.0        | 12.0                             | 25.0 | 500   | 1.0       | FSQ3KK334K112KL5 |
| 1000 | 600 | 0.39      | 42         | 28   | 17  | 37.5 | 7.4            | 195.0        | 11.5                             | 25.0 | 500   | 1.0       | FSQ3KK394K172KL5 |
| 1000 | 600 | 0.47      | 42         | 28   | 17  | 37.5 | 7.6            | 235.0        | 11.0                             | 25.0 | 500   | 1.0       | FSQ3KK474K172KL5 |
| 1000 | 600 | 0.56      | 42         | 28   | 17  | 37.5 | 8.0            | 280.0        | 10.5                             | 25.0 | 500   | 1.0       | FSQ3KK564K172KL5 |
| 1000 | 600 | 0.68      | 42         | 32   | 19  | 37.5 | 8.5            | 340.0        | 10.0                             | 25.0 | 500   | 1.0       | FSQ3KK684K212KL5 |
| 1000 | 600 | 0.82      | 42         | 40   | 20  | 37.5 | 10.0           | 410.0        | 9.0                              | 25.0 | 500   | 1.0       | FSQ3KK824K242KL5 |
| 1000 | 600 | 1.0       | 42         | 40   | 20  | 37.5 | 11.0           | 500.0        | 7.0                              | 25.0 | 500   | 1.0       | FSQ3KK105K242KL5 |
| 1000 | 600 | 1.2       | 42         | 44   | 24  | 37.5 | 12.0           | 600.0        | 6.5                              | 25.0 | 500   | 1.0       | FSQ3KK125K322KL5 |
| 1000 | 600 | 1.5       | 42         | 44   | 24  | 37.5 | 13.0           | 750.0        | 6.0                              | 25.0 | 500   | 1.0       | FSQ3KK155K322KL5 |
| 1000 | 600 | 1.8       | 42         | 45   | 30  | 37.5 | 15.0           | 900.0        | 5.0                              | 25.0 | 500   | 1.0       | FSQ3KK185K422KL5 |
| 1000 | 600 | 2.2       | 42         | 45   | 30  | 37.5 | 16.0           | 1100.0       | 4.0                              | 25.0 | 500   | 1.0       | FSQ3KK225K422KL5 |
| 1600 | 650 | 0.0033    | 18         | 11   | 5   | 15   | 1.1            | 19.8         | 190.0                            | 12.0 | 6000  | 0.8       | FSQ3WK332E142EL5 |
| 1600 | 650 | 0.0047    | 18         | 11   | 5   | 15   | 1.3            | 28.2         | 165.0                            | 12.0 | 6000  | 0.8       | FSQ3WK472E142EL5 |
| 1600 | 650 | 0.0056    | 18         | 11   | 5   | 15   | 1.4            | 33.6         | 120.0                            | 12.0 | 6000  | 0.8       | FSQ3WK562E142EL5 |
| 1600 | 650 | 0.0068    | 18         | 11   | 5   | 15   | 1.6            | 40.8         | 100.0                            | 12.0 | 6000  | 0.8       | FSQ3WK682E142EL5 |
| 1600 | 650 | 0.0082    | 18         | 11   | 5   | 15   | 1.8            | 49.2         | 95.0                             | 12.0 | 6000  | 0.8       | FSQ3WK822E142EL5 |
| 1600 | 650 | 0.01      | 18         | 11   | 5   | 15   | 2.0            | 60.0         | 65.0                             | 12.0 | 6000  | 0.8       | FSQ3WK103E142EL5 |
| 1600 | 650 | 0.012     | 18         | 12   | 6   | 15   | 2.3            | 72.0         | 50.0                             | 12.0 | 6000  | 0.8       | FSQ3WK123E172EL5 |
| 1600 | 650 | 0.015     | 18         | 12   | 6   | 15   | 2.5            | 90.0         | 45.0                             | 12.0 | 6000  | 0.8       | FSQ3WK153E172EL5 |
| 1600 | 650 | 0.018     | 18         | 13.5 | 7.5 | 15   | 3.0            | 108.0        | 35.0                             | 12.0 | 6000  | 0.8       | FSQ3WK183E292EL5 |
| 1600 | 650 | 0.022     | 18         | 13.5 | 7.5 | 15   | 3.2            | 132.0        | 30.0                             | 12.0 | 6000  | 0.8       | FSQ3WK223E292EL5 |
| 1600 | 650 | 0.027     | 18         | 14.5 | 8.5 | 15   | 3.8            | 162.0        | 25.0                             | 12.0 | 6000  | 0.8       | FSQ3WK273E342EL5 |
| 1600 | 650 | 0.033     | 18         | 14.5 | 8.5 | 15   | 4.0            | 198.0        | 20.0                             | 12.0 | 6000  | 0.8       | FSQ3WK333E342EL5 |

# Double Metallized Polypropylene Film Pulse Capacitors

## FSQ Series - 630 ~ 2000VDC (Automotive Grade)



### Rating and Part Number

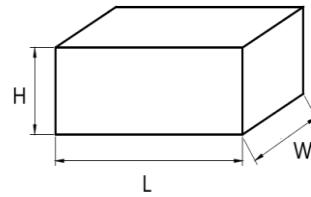
| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|      |     | μF        | mm         | mm   | mm  | mm   | 70°C A         | mΩ           | nH                               | V/us | mm    | mm        |                  |
| 1600 | 650 | 0.015     | 26         | 15.5 | 6   | 22.5 | 2.8            | 45.0         | 40.0                             | 15.0 | 3000  | 0.8       | FSQ3WK153F142FL5 |
| 1600 | 650 | 0.022     | 26         | 15.5 | 6   | 22.5 | 3.5            | 66.0         | 30.0                             | 15.0 | 3000  | 0.8       | FSQ3WK223F142FL5 |
| 1600 | 650 | 0.033     | 26         | 15.5 | 6   | 22.5 | 4.0            | 99.0         | 20.0                             | 15.0 | 3000  | 0.8       | FSQ3WK333F142FL5 |
| 1600 | 650 | 0.039     | 26         | 16.5 | 7   | 22.5 | 4.8            | 117.0        | 16.0                             | 15.0 | 3000  | 0.8       | FSQ3WK393F172FL5 |
| 1600 | 650 | 0.047     | 26         | 16.5 | 7   | 22.5 | 5.2            | 141.0        | 15.0                             | 15.0 | 3000  | 0.8       | FSQ3WK473F172FL5 |
| 1600 | 650 | 0.056     | 26         | 17   | 8.5 | 22.5 | 5.4            | 168.0        | 14.0                             | 15.0 | 3000  | 0.8       | FSQ3WK563F202FL5 |
| 1600 | 650 | 0.068     | 26         | 19   | 10  | 22.5 | 5.8            | 204.0        | 13.0                             | 15.0 | 3000  | 0.8       | FSQ3WK683F242FL5 |
| 1600 | 650 | 0.082     | 26         | 19   | 10  | 22.5 | 6.0            | 246.0        | 12.0                             | 15.0 | 3000  | 0.8       | FSQ3WK823F242FL5 |
| 1600 | 650 | 0.1       | 26         | 20   | 11  | 22.5 | 6.5            | 300.0        | 11.0                             | 15.0 | 3000  | 0.8       | FSQ3WK104F262FL5 |
| 1600 | 650 | 0.039     | 32         | 17   | 8   | 27.5 | 3.8            | 78.0         | 30.0                             | 20.0 | 2000  | 0.8       | FSQ3WK393G142GL5 |
| 1600 | 650 | 0.047     | 32         | 17   | 8   | 27.5 | 4.0            | 94.0         | 29.0                             | 20.0 | 2000  | 0.8       | FSQ3WK473G142GL5 |
| 1600 | 650 | 0.056     | 32         | 17   | 8   | 27.5 | 4.5            | 112.0        | 28.0                             | 20.0 | 2000  | 0.8       | FSQ3WK563G142GL5 |
| 1600 | 650 | 0.068     | 32         | 18   | 9   | 27.5 | 5.0            | 136.0        | 24.0                             | 20.0 | 2000  | 0.8       | FSQ3WK683G152GL5 |
| 1600 | 650 | 0.082     | 32         | 20   | 11  | 27.5 | 5.5            | 164.0        | 20.0                             | 20.0 | 2000  | 0.8       | FSQ3WK823G182GL5 |
| 1600 | 650 | 0.1       | 32         | 22   | 13  | 27.5 | 6.0            | 200.0        | 18.0                             | 20.0 | 2000  | 0.8       | FSQ3WK104G212GL5 |
| 1600 | 650 | 0.12      | 32         | 22   | 13  | 27.5 | 6.5            | 240.0        | 16.0                             | 20.0 | 2000  | 0.8       | FSQ3WK124G212GL5 |
| 1600 | 650 | 0.15      | 32         | 24.5 | 13  | 27.5 | 7.0            | 300.0        | 14.0                             | 20.0 | 2000  | 0.8       | FSQ3WK154G222GL5 |
| 1600 | 650 | 0.18      | 32         | 28   | 14  | 27.5 | 7.5            | 360.0        | 12.0                             | 20.0 | 2000  | 0.8       | FSQ3WK184G262GL5 |
| 1600 | 650 | 0.22      | 32         | 33   | 18  | 27.5 | 8.5            | 440.0        | 10.0                             | 20.0 | 2000  | 0.8       | FSQ3WK224G342GL5 |
| 1600 | 650 | 0.27      | 32         | 33   | 18  | 27.5 | 9.0            | 540.0        | 9.5                              | 20.0 | 2000  | 0.8       | FSQ3WK274G342GL5 |
| 1600 | 650 | 0.33      | 32         | 33   | 18  | 27.5 | 10.0           | 660.0        | 8.0                              | 20.0 | 2000  | 0.8       | FSQ3WK334G342GL5 |
| 1600 | 650 | 0.39      | 32         | 37   | 22  | 27.5 | 11.0           | 780.0        | 7.0                              | 20.0 | 2000  | 1.0       | FSQ3WK394G402GL5 |
| 1600 | 650 | 0.47      | 32         | 37   | 22  | 27.5 | 12.0           | 940.0        | 6.0                              | 20.0 | 2000  | 1.0       | FSQ3WK474G402GL5 |
| 1600 | 650 | 0.082     | 42         | 22   | 11  | 37.5 | 4.8            | 98.4         | 28.0                             | 25.0 | 1200  | 1.0       | FSQ3WK823K852KL5 |
| 1600 | 650 | 0.1       | 42         | 22   | 11  | 37.5 | 5.0            | 120.0        | 24.0                             | 25.0 | 1200  | 1.0       | FSQ3WK104K852KL5 |
| 1600 | 650 | 0.12      | 42         | 22   | 11  | 37.5 | 5.5            | 144.0        | 22.0                             | 25.0 | 1200  | 1.0       | FSQ3WK124K852KL5 |
| 1600 | 650 | 0.15      | 42         | 22   | 11  | 37.5 | 5.8            | 180.0        | 20.0                             | 25.0 | 1200  | 1.0       | FSQ3WK154K852KL5 |
| 1600 | 650 | 0.18      | 42         | 24   | 13  | 37.5 | 6.0            | 216.0        | 18.0                             | 25.0 | 1200  | 1.0       | FSQ3WK184K112KL5 |
| 1600 | 650 | 0.22      | 42         | 24   | 13  | 37.5 | 6.2            | 264.0        | 17.0                             | 25.0 | 1200  | 1.0       | FSQ3WK224K112KL5 |
| 1600 | 650 | 0.27      | 42         | 24   | 13  | 37.5 | 6.5            | 324.0        | 15.0                             | 25.0 | 1200  | 1.0       | FSQ3WK274K112KL5 |
| 1600 | 650 | 0.33      | 42         | 28.5 | 16  | 37.5 | 6.8            | 396.0        | 14.0                             | 25.0 | 1200  | 1.0       | FSQ3WK334K862KL5 |
| 1600 | 650 | 0.39      | 42         | 28.5 | 16  | 37.5 | 7.5            | 468.0        | 12.5                             | 25.0 | 1200  | 1.0       | FSQ3WK394K862KL5 |
| 1600 | 650 | 0.47      | 42         | 32   | 19  | 37.5 | 8.0            | 564.0        | 12.0                             | 25.0 | 1200  | 1.0       | FSQ3WK474K212KL5 |
| 1600 | 650 | 0.56      | 42         | 40   | 20  | 37.5 | 9.0            | 672.0        | 11.0                             | 25.0 | 1200  | 1.0       | FSQ3WK564K242KL5 |
| 1600 | 650 | 0.68      | 42         | 40   | 20  | 37.5 | 9.5            | 816.0        | 10.5                             | 25.0 | 1200  | 1.0       | FSQ3WK684K242KL5 |
| 1600 | 650 | 0.82      | 42         | 44   | 24  | 37.5 | 10.5           | 984.0        | 9.0                              | 25.0 | 1200  | 1.0       | FSQ3WK824K322KL5 |
| 1600 | 650 | 1         | 42         | 44   | 24  | 37.5 | 12.0           | 1200.0       | 7.5                              | 25.0 | 1200  | 1.0       | FSQ3WK105K322KL5 |
| 1600 | 650 | 1.2       | 42         | 45   | 30  | 37.5 | 14.0           | 1440.0       | 6.0                              | 25.0 | 1200  | 1.0       | FSQ3WK125K422KL5 |
| 2000 | 700 | 0.001     | 18         | 11   | 5   | 15   | 0.5            | 9.5          | 630.0                            | 12.0 | 9500  | 0.8       | FSQ3DK102E142EL5 |
| 2000 | 700 | 0.0012    | 18         | 11   | 5   | 15   | 0.6            | 11.4         | 500.0                            | 12.0 | 9500  | 0.8       | FSQ3DK122E142EL5 |
| 2000 | 700 | 0.0015    | 18         | 11   | 5   | 15   | 0.7            | 14.3         | 420.0                            | 12.0 | 9500  | 0.8       | FSQ3DK152E142EL5 |
| 2000 | 700 | 0.0018    | 18         | 11   | 5   | 15   | 0.8            | 17.1         | 350.0                            | 12.0 | 9500  | 0.8       | FSQ3DK182E142EL5 |
| 2000 | 700 | 0.0022    | 18         | 11   | 5   | 15   | 0.9            | 20.9         | 300.0                            | 12.0 | 9500  | 0.8       | FSQ3DK222E142EL5 |
| 2000 | 700 | 0.0027    | 18         | 11   | 5   | 15   | 1.0            | 25.7         | 240.0                            | 12.0 | 9500  | 0.8       | FSQ3DK272E142EL5 |
| 2000 | 700 | 0.0033    | 18         | 11   | 5   | 15   | 1.2            | 31.4         | 190.0                            | 12.0 | 9500  | 0.8       | FSQ3DK332E142EL5 |
| 2000 | 700 | 0.0039    | 18         | 11   | 5   | 15   | 1.3            | 37.1         | 165.0                            | 12.0 | 9500  | 0.8       | FSQ3DK392E142EL5 |
| 2000 | 700 | 0.0047    | 18         | 11   | 5   | 15   | 1.4            | 44.7         | 135.0                            | 12.0 | 9500  | 0.8       | FSQ3DK472E142EL5 |
| 2000 | 700 | 0.0056    | 18         | 12   | 6   | 15   | 1.6            | 53.2         | 110.0                            | 12.0 | 9500  | 0.8       | FSQ3DK562E172EL5 |
| 2000 | 700 | 0.0068    | 18         | 12   | 6   | 15   | 1.8            | 64.6         | 95.0                             | 12.0 | 9500  | 0.8       | FSQ3DK682E172EL5 |
| 2000 | 700 | 0.0082    | 18         | 12   | 6   | 15   | 2.0            | 77.9         | 80.0                             | 12.0 | 9500  | 0.8       | FSQ3DK822E172EL5 |
| 2000 | 700 | 0.01      | 18         | 13.5 | 7.5 | 15   | 2.5            | 95.0         | 65.0                             | 12.0 | 9500  | 0.8       | FSQ3DK103E292EL5 |
| 2000 | 700 | 0.012     | 18         | 14.5 | 8.5 | 15   | 2.8            | 114.0        | 50.0                             | 12.0 | 9500  | 0.8       | FSQ3DK123E342EL5 |
| 2000 | 700 | 0.015     | 18         | 14.5 | 8.5 | 15   | 3.0            | 142.5        | 45.0                             | 12.0 | 9500  | 0.8       | FSQ3DK153E342EL5 |
| 2000 | 700 | 0.018     | 18         | 16   | 10  | 15   | 3.8            | 171.0        | 35.0                             | 12.0 | 9500  | 0.8       | FSQ3DK183E432EL5 |
| 2000 | 700 | 0.001     | 26         | 15.5 | 6   | 22.5 | 0.6            | 4.5          | 550.0                            | 15.0 | 4500  | 0.8       | FSQ3DK102F142FL5 |
| 2000 | 700 | 0.0012    | 26         | 15.5 | 6   | 22.5 | 0.7            | 5.4          | 450.0                            | 15.0 | 4500  | 0.8       | FSQ3DK122F142FL5 |

## Rating and Part Number

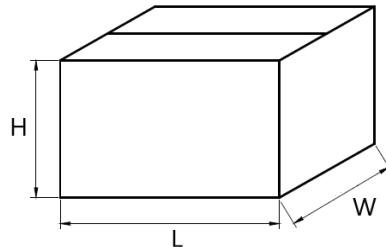
| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
| μF   | mm  | mm        | mm         | mm   |     |      | 70°C A         | A            | mΩ                               | nH   | V/us  | mm        |                  |
| 2000 | 700 | 0.0015    | 26         | 15.5 | 6   | 22.5 | 0.8            | 6.8          | 360.0                            | 15.0 | 4500  | 0.8       | FSQ3DK152F142FL5 |
| 2000 | 700 | 0.0018    | 26         | 15.5 | 6   | 22.5 | 0.9            | 8.1          | 300.0                            | 15.0 | 4500  | 0.8       | FSQ3DK182F142FL5 |
| 2000 | 700 | 0.0022    | 26         | 15.5 | 6   | 22.5 | 1.0            | 9.9          | 250.0                            | 15.0 | 4500  | 0.8       | FSQ3DK222F142FL5 |
| 2000 | 700 | 0.0027    | 26         | 15.5 | 6   | 22.5 | 1.2            | 12.2         | 230.0                            | 15.0 | 4500  | 0.8       | FSQ3DK272F142FL5 |
| 2000 | 700 | 0.0033    | 26         | 15.5 | 6   | 22.5 | 1.2            | 14.9         | 200.0                            | 15.0 | 4500  | 0.8       | FSQ3DK332F142FL5 |
| 2000 | 700 | 0.0039    | 26         | 15.5 | 6   | 22.5 | 1.4            | 17.6         | 180.0                            | 15.0 | 4500  | 0.8       | FSQ3DK392F142FL5 |
| 2000 | 700 | 0.0047    | 26         | 15.5 | 6   | 22.5 | 1.6            | 21.2         | 140.0                            | 15.0 | 4500  | 0.8       | FSQ3DK472F142FL5 |
| 2000 | 700 | 0.0056    | 26         | 15.5 | 6   | 22.5 | 1.8            | 25.2         | 120.0                            | 15.0 | 4500  | 0.8       | FSQ3DK562F142FL5 |
| 2000 | 700 | 0.0068    | 26         | 15.5 | 6   | 22.5 | 2.0            | 30.6         | 95.0                             | 15.0 | 4500  | 0.8       | FSQ3DK682F142FL5 |
| 2000 | 700 | 0.0082    | 26         | 15.5 | 6   | 22.5 | 2.2            | 36.9         | 75.0                             | 15.0 | 4500  | 0.8       | FSQ3DK822F142FL5 |
| 2000 | 700 | 0.01      | 26         | 15.5 | 6   | 22.5 | 2.3            | 45.0         | 65.0                             | 15.0 | 4500  | 0.8       | FSQ3DK103F142FL5 |
| 2000 | 700 | 0.012     | 26         | 15.5 | 6   | 22.5 | 2.5            | 54.0         | 60.0                             | 15.0 | 4500  | 0.8       | FSQ3DK123F142FL5 |
| 2000 | 700 | 0.015     | 26         | 15.5 | 6   | 22.5 | 2.8            | 67.5         | 45.0                             | 15.0 | 4500  | 0.8       | FSQ3DK153F142FL5 |
| 2000 | 700 | 0.018     | 26         | 15.5 | 6   | 22.5 | 3.2            | 81.0         | 35.0                             | 15.0 | 4500  | 0.8       | FSQ3DK183F142FL5 |
| 2000 | 700 | 0.022     | 26         | 16.5 | 7   | 22.5 | 4.0            | 99.0         | 26.0                             | 15.0 | 4500  | 0.8       | FSQ3DK223F172FL5 |
| 2000 | 700 | 0.027     | 26         | 16.5 | 7   | 22.5 | 4.5            | 121.5        | 20.0                             | 15.0 | 4500  | 0.8       | FSQ3DK273F172FL5 |
| 2000 | 700 | 0.033     | 26         | 17   | 8.5 | 22.5 | 5.2            | 148.5        | 18.0                             | 15.0 | 4500  | 0.8       | FSQ3DK333F202FL5 |
| 2000 | 700 | 0.039     | 26         | 19   | 10  | 22.5 | 5.8            | 175.5        | 15.0                             | 15.0 | 4500  | 0.8       | FSQ3DK393F242FL5 |
| 2000 | 700 | 0.047     | 26         | 19   | 10  | 22.5 | 6.0            | 211.5        | 13.0                             | 15.0 | 4500  | 0.8       | FSQ3DK473F242FL5 |
| 2000 | 700 | 0.056     | 26         | 20   | 11  | 22.5 | 6.5            | 252.0        | 12.0                             | 15.0 | 4500  | 0.8       | FSQ3DK563F262FL5 |
| 2000 | 700 | 0.022     | 32         | 17   | 8   | 27.5 | 3.0            | 55.0         | 45.0                             | 20.0 | 2500  | 0.8       | FSQ3DK223G142GL5 |
| 2000 | 700 | 0.027     | 32         | 17   | 8   | 27.5 | 3.5            | 67.5         | 40.0                             | 20.0 | 2500  | 0.8       | FSQ3DK273G142GL5 |
| 2000 | 700 | 0.033     | 32         | 18   | 9   | 27.5 | 4.0            | 82.5         | 35.0                             | 20.0 | 2500  | 0.8       | FSQ3DK333G152GL5 |
| 2000 | 700 | 0.039     | 32         | 20   | 11  | 27.5 | 4.5            | 97.5         | 28.0                             | 20.0 | 2500  | 0.8       | FSQ3DK393G182GL5 |
| 2000 | 700 | 0.047     | 32         | 20   | 11  | 27.5 | 4.8            | 117.5        | 25.0                             | 20.0 | 2500  | 0.8       | FSQ3DK473G182GL5 |
| 2000 | 700 | 0.056     | 32         | 22   | 13  | 27.5 | 5.0            | 140.0        | 24.0                             | 20.0 | 2500  | 0.8       | FSQ3DK563G212GL5 |
| 2000 | 700 | 0.068     | 32         | 22   | 13  | 27.5 | 5.5            | 170.0        | 22.0                             | 20.0 | 2500  | 0.8       | FSQ3DK683G212GL5 |
| 2000 | 700 | 0.082     | 32         | 24.5 | 13  | 27.5 | 6.0            | 205.0        | 20.0                             | 20.0 | 2500  | 0.8       | FSQ3DK823G222GL5 |
| 2000 | 700 | 0.1       | 32         | 28   | 14  | 27.5 | 6.5            | 250.0        | 18.0                             | 20.0 | 2500  | 0.8       | FSQ3DK104G262GL5 |
| 2000 | 700 | 0.12      | 32         | 33   | 18  | 27.5 | 7.0            | 300.0        | 16.0                             | 20.0 | 2500  | 0.8       | FSQ3DK124G342GL5 |
| 2000 | 700 | 0.15      | 32         | 33   | 18  | 27.5 | 7.5            | 375.0        | 14.0                             | 20.0 | 2500  | 0.8       | FSQ3DK154G342GL5 |
| 2000 | 700 | 0.18      | 32         | 37   | 22  | 27.5 | 8.0            | 450.0        | 12.0                             | 20.0 | 2500  | 1.0       | FSQ3DK184G402GL5 |
| 2000 | 700 | 0.22      | 32         | 37   | 22  | 27.5 | 8.5            | 550.0        | 10.0                             | 20.0 | 2500  | 1.0       | FSQ3DK224G402GL5 |
| 2000 | 700 | 0.033     | 42         | 22   | 11  | 37.5 | 4.0            | 49.5         | 35.0                             | 25.0 | 1500  | 1.0       | FSQ3DK333K852KL5 |
| 2000 | 700 | 0.039     | 42         | 22   | 11  | 37.5 | 4.5            | 58.5         | 28.0                             | 25.0 | 1500  | 1.0       | FSQ3DK393K852KL5 |
| 2000 | 700 | 0.047     | 42         | 22   | 11  | 37.5 | 4.8            | 70.5         | 26.0                             | 25.0 | 1500  | 1.0       | FSQ3DK473K852KL5 |
| 2000 | 700 | 0.056     | 42         | 22   | 11  | 37.5 | 5.0            | 84.0         | 24.0                             | 25.0 | 1500  | 1.0       | FSQ3DK563K852KL5 |
| 2000 | 700 | 0.068     | 42         | 22   | 11  | 37.5 | 5.4            | 102.0        | 23.0                             | 25.0 | 1500  | 1.0       | FSQ3DK683K852KL5 |
| 2000 | 700 | 0.082     | 42         | 22   | 11  | 37.5 | 5.8            | 123.0        | 22.0                             | 25.0 | 1500  | 1.0       | FSQ3DK823K852KL5 |
| 2000 | 700 | 0.1       | 42         | 24   | 13  | 37.5 | 6.5            | 150.0        | 18.0                             | 25.0 | 1500  | 1.0       | FSQ3DK104K112KL5 |
| 2000 | 700 | 0.12      | 42         | 24   | 13  | 37.5 | 7.0            | 180.0        | 16.0                             | 25.0 | 1500  | 1.0       | FSQ3DK124K112KL5 |
| 2000 | 700 | 0.15      | 42         | 28.5 | 16  | 37.5 | 7.5            | 225.0        | 15.0                             | 25.0 | 1500  | 1.0       | FSQ3DK154K862KL5 |
| 2000 | 700 | 0.18      | 42         | 28.5 | 16  | 37.5 | 8.0            | 270.0        | 14.0                             | 25.0 | 1500  | 1.0       | FSQ3DK184K862KL5 |
| 2000 | 700 | 0.22      | 42         | 32   | 19  | 37.5 | 8.5            | 330.0        | 12.0                             | 25.0 | 1500  | 1.0       | FSQ3DK224K212KL5 |
| 2000 | 700 | 0.27      | 42         | 40   | 20  | 37.5 | 9.0            | 405.0        | 11.0                             | 25.0 | 1500  | 1.0       | FSQ3DK274K242KL5 |
| 2000 | 700 | 0.33      | 42         | 40   | 20  | 37.5 | 9.5            | 495.0        | 10.5                             | 25.0 | 1500  | 1.0       | FSQ3DK334K242KL5 |
| 2000 | 700 | 0.39      | 42         | 44   | 24  | 37.5 | 10.0           | 585.0        | 9.5                              | 25.0 | 1500  | 1.0       | FSQ3DK394K322KL5 |
| 2000 | 700 | 0.47      | 42         | 44   | 24  | 37.5 | 10.5           | 705.0        | 9.0                              | 25.0 | 1500  | 1.0       | FSQ3DK474K322KL5 |
| 2000 | 700 | 0.56      | 42         | 45   | 30  | 37.5 | 12.0           | 840.0        | 7.5                              | 25.0 | 1500  | 1.0       | FSQ3DK564K422KL5 |
| 2000 | 700 | 0.68      | 42         | 45   | 30  | 37.5 | 14.0           | 1020.0       | 6.0                              | 25.0 | 1500  | 1.0       | FSQ3DK684K422KL5 |

## Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 35     |



## Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 10    | C13       | 13        | 11   | 5   | 1,200              | 1,488       | 680       |
|       | C16       | 13        | 12   | 6   | 1,200              | 1,224       | 560       |
|       | C24       | 13        | 13   | 7   | 1,200              | 1,056       | 480       |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F14       | 26        | 15.5 | 6   | 612                | 612         | 350       |
|       | F17       | 26        | 16.5 | 7   | 528                | 528         | 300       |
|       | F20       | 26        | 17   | 8.5 | 432                | 432         | 250       |
|       | F24       | 26        | 19   | 10  | 372                | 372         | 210       |
|       | F26       | 26        | 20   | 11  | 336                | 336         | 190       |
|       | F27       | 26        | 22   | 12  | 300                | 300         | 170       |
| 27.5  | G14       | 32        | 17   | 8   | 380                | 380         |           |
|       | G15       | 32        | 18   | 9   | 340                | 340         |           |
|       | G18       | 32        | 20   | 11  | 280                | 280         |           |
|       | G21       | 32        | 22   | 13  | 230                | 230         |           |
|       | G22       | 32        | 24.5 | 13  | 230                | 230         |           |
|       | G26       | 32        | 28   | 14  | 220                | 220         |           |
|       | G34       | 32        | 33   | 18  | 170                | 170         |           |
|       | G40       | 32        | 37   | 22  | 140                | 140         |           |
| 37.5  | K11       | 42        | 24   | 13  | 161                | 161         |           |
|       | K17       | 42        | 28   | 17  | 126                | 126         |           |
|       | K21       | 42        | 32   | 19  | 112                | 112         |           |
|       | K24       | 42        | 40   | 20  | 105                | 105         |           |
|       | K32       | 42        | 44   | 24  | 91                 | 91          |           |
|       | K42       | 42        | 45   | 30  | 70                 | 70          |           |
|       | K47       | 42        | 50   | 35  | 63                 | 63          |           |
|       | K85       | 42        | 22   | 11  | 196                | 196         |           |
|       | K86       | 42        | 28.5 | 16  | 133                | 133         |           |

## Overview

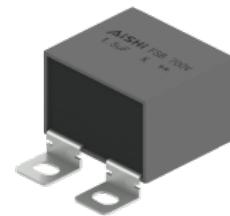
The FSB capacitor is constructed of metallized polypropylene film with double-sided metallized film encapsulated with epoxy resin in a rectangular plastic case, with lug terminals.

## Applications

Widely used in high voltage, high frequency, high current, pulse circuit and IGBT protection.

## Features

- High ripple current
- Self-healing property
- Low losses
- Small inherent temperature rise
- Suitable for high frequency applications
- High contact reliability



## Qualification

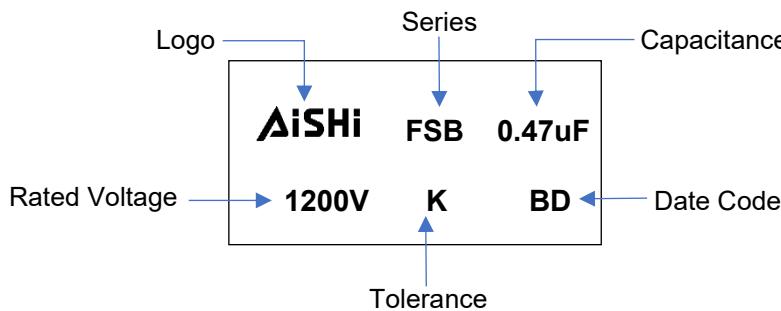
|                    |                      |
|--------------------|----------------------|
| Reference Standard | IEC 61071            |
| Climate Category   | 40/85/56 IEC 60068-1 |



## General Technical Data

|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film   |
| Voltage Range               | 850Vdc to 2000Vdc   |
| Capacitance Range           | 0.1uF ~ 4.0uF   |
| Capacitance Tolerance       | ±5% or ±10% at +25°C  |
| Operating Temperature Range | -40°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.25% per °C for Urms)  |
| Climatic Category           | 40/85/56 IEC 60068-1  |
| Dissipation Factor          | 0.0010 (0.1%) at 25°C, 1KHz   |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 100 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 30 000 s |

## Marking



## Part Number System

| F              | SB   | 3B   | K                   | 225   | N19                      | SN6                          | G                                |
|----------------|--|--|---------------------|---|--------------------------|------------------------------|----------------------------------|
| Capacitor Type | Series   | Voltage (VDC)                                      | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Solder slice Code                |
| F = Film       | Snubber Capacitor, Lug Terminal type, Metallized PP Film | 850=2P<br>1000=3K<br>1200=3B<br>1600=3W<br>2000=3D | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Solder slice Code Table |

## Terminal Code

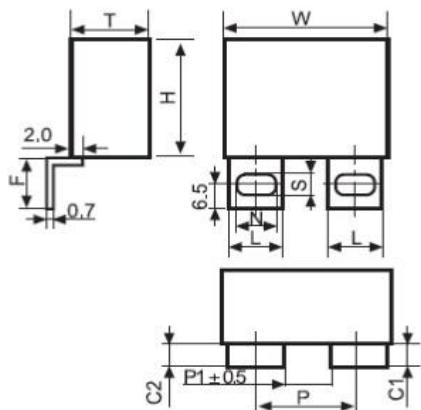
| Digit One (Lead/Terminal Type) |   | Digit Two (Distance of hole for fixing) |   | Digit Three (Distance of solder slice) |   |
|--------------------------------|---|---|---|--|---|
| Style S                        | S | 16~24                                   | A | 0                                      | 0 |
| Style N                        | N | 17~25                                   | B | 6                                      | 6 |
| Style W                        | W | 20~25                                   | P | 7                                      | 7 |
| Style U                        | U | 21~29                                   | C | 8                                      | 8 |
| Style F                        | F | 22~24                                   | W | 11                                     | A |
| Style B                        | B | 22~30                                   | D | 12                                     | B |
|                                |   | 23~28                                   | Q | 15                                     | P |
|                                |   | 25~26                                   | X | 17                                     | M |
|                                |   | 30~38                                   | E | 20                                     | C |
|                                |   | 31~39                                   | F | 21                                     | D |
|                                |   | 32~45                                   | V | 24                                     | N |
|                                |   | 35~43                                   | G | 25                                     | E |
|                                |   | 36~44                                   | H | 26                                     | F |
|                                |   | 37~42                                   | U | 33                                     | G |
|                                |   | 52~62                                   | J | 37                                     | H |
|                                |   | 53~63                                   | R | 38                                     | J |
|                                |   | 56~66                                   | K | 51                                     | K |
|                                |   | 57~67                                   | L | 52                                     | L |
|                                |   | 68~77                                   | S |  |   |
|                                |   | 70~80                                   | M |  |   |
|                                |   | 71~81                                   | N |  |   |

## Solder Slice Code

| Size of solder slice |   |
|----------------------|---|
| M(5-7)               | 5 |
| M(6-8)               | 6 |
| M(8-10)              | 8 |
| M(8-14)              | A |
| M(8-8)               | B |

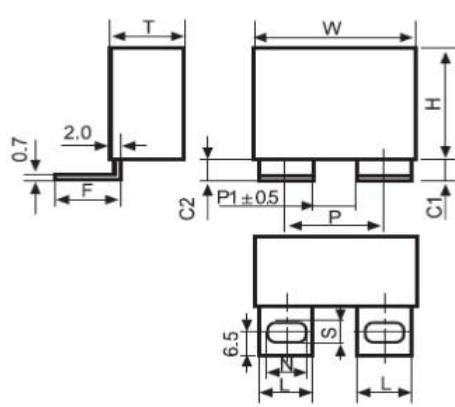
### Dimension (mm)

Style S



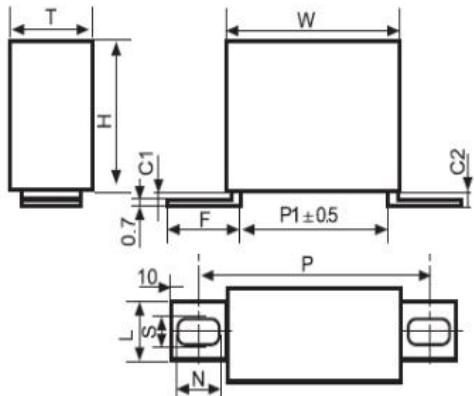
L x F x N x S = 14.0 x 16.0 x 10.2 x 6.2

Style N



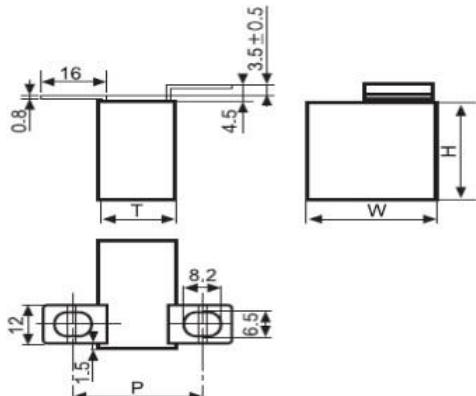
L x F x N x S = 14.0 x 16.0 x 10.2 x 6.2

Style W



L x F x N x S = 14.0 x 22.0 x 11.2 x 6.2

Style U



L x F x N x S = 12.0 x 16.0 x 8.2 x 6.5

### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           |
|-----------|-----------|-----------|------|-----------|------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance |
| N11       | 42.0      | 0.8       | 40.0 | 0.8       | 20.0 | 0.8       |
| N13       | 42.0      | 0.8       | 44.0 | 0.8       | 24.0 | 0.8       |
| N15       | 42.0      | 0.8       | 37.0 | 0.8       | 28.0 | 0.8       |
| N18       | 42.0      | 0.8       | 45.0 | 0.8       | 30.0 | 0.8       |
| N21       | 42.5      | 0.8       | 35.5 | 0.8       | 33.5 | 0.8       |
| P13       | 57.5      | 1.0       | 45.0 | 1.0       | 30.0 | 1.0       |
| P17       | 57.5      | 1.0       | 50.0 | 1.0       | 35.0 | 1.0       |

# Double Metallized Polypropylene Film Snubber Capacitors

## FSB Series - 850 ~ 2000VDC (Lug Terminal)



### Rating and Part Number

| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |      |      | Irms          | Peak      | ESR <sub>Typical</sub> | ESL | dv/dt | Style | Part Number      |
|------|-------------------------|------------|------|------|---------------|-----------|------------------------|-----|-------|-------|------------------|
|      |                         | W mm       | H mm | T mm | 100KHz 70°C A | Current A | 100KHz mΩ              |     |       |       |                  |
| 850  | 0.47                    | 42.0       | 40.0 | 20.0 | 14.0          | 357.0     | 9.4                    | 40  | 760   | S     | FSB2PK474N11SCA6 |
| 850  | 0.68                    | 42.0       | 40.0 | 20.0 | 17.0          | 517.0     | 6.6                    | 40  | 760   | S     | FSB2PK684N11SCA6 |
| 850  | 1.0                     | 42.0       | 40.0 | 20.0 | 20.0          | 760.0     | 4.6                    | 40  | 760   | S     | FSB2PK105N11SCA6 |
| 850  | 1.50                    | 42.0       | 37.0 | 28.0 | 27.0          | 1140.0    | 3.1                    | 36  | 760   | S     | FSB2PK155N15SCA6 |
| 850  | 1.5                     | 42.0       | 35.5 | 33.5 | 28.0          | 1140.0    | 3.0                    | 36  | 760   | S     | FSB2PK155N21SCA6 |
| 850  | 2.00                    | 42.0       | 45.0 | 30.0 | 34.0          | 1520.0    | 2.4                    | 43  | 760   | S     | FSB2PK205N18SCA6 |
| 850  | 2.2                     | 42.0       | 45.0 | 30.0 | 35.0          | 1672.0    | 2.2                    | 43  | 760   | S     | FSB2PK225N18SCA6 |
| 850  | 2.50                    | 57.5       | 45.0 | 30.0 | 37.0          | 1175.0    | 2.0                    | 45  | 470   | S     | FSB2PK255P13SGE6 |
| 850  | 3.0                     | 57.5       | 45.0 | 30.0 | 30.0          | 1410.0    | 3.5                    | 45  | 470   | S     | FSB2PK305P13SGE6 |
| 850  | 3.30                    | 57.5       | 45.0 | 30.0 | 31.0          | 1551.0    | 3.2                    | 45  | 470   | S     | FSB2PK335P13SGE6 |
| 850  | 4.0                     | 57.5       | 50.0 | 35.0 | 34.0          | 1880.0    | 2.6                    | 48  | 470   | S     | FSB2PK405P17SGE6 |
| 850  | 5.00                    | 57.5       | 50.0 | 35.0 | 40.0          | 2350.0    | 2.2                    | 48  | 470   | S     | FSB2PK505P17SGE6 |
| 1000 | 0.5                     | 42.0       | 40.0 | 20.0 | 14.0          | 400.0     | 8.7                    | 40  | 850   | S     | FSB3KK474N11SCA6 |
| 1000 | 0.68                    | 42.0       | 40.0 | 20.0 | 18.0          | 578.0     | 6.1                    | 40  | 850   | S     | FSB3KK684N11SCA6 |
| 1000 | 1.0                     | 42.0       | 40.0 | 20.0 | 20.0          | 850.0     | 4.3                    | 40  | 850   | S     | FSB3KK105N11SCA6 |
| 1000 | 1.50                    | 42.0       | 37.0 | 28.0 | 28.0          | 1275.0    | 2.9                    | 36  | 850   | S     | FSB3KK155N15SCA6 |
| 1000 | 1.5                     | 42.0       | 35.5 | 33.5 | 29.0          | 1275.0    | 2.8                    | 36  | 850   | S     | FSB3KK155N21SCA6 |
| 1000 | 2.00                    | 42.0       | 45.0 | 30.0 | 35.0          | 1700.0    | 2.3                    | 43  | 850   | S     | FSB3KK205N18SCA6 |
| 1000 | 2.2                     | 57.5       | 45.0 | 30.0 | 28.0          | 1166.0    | 4.4                    | 45  | 530   | S     | FSB3KK225P13SGE6 |
| 1000 | 2.50                    | 57.5       | 45.0 | 30.0 | 29.0          | 1325.0    | 3.8                    | 45  | 530   | S     | FSB3KK255P13SGE6 |
| 1000 | 3.0                     | 57.5       | 45.0 | 30.0 | 31.0          | 1590.0    | 3.2                    | 45  | 530   | S     | FSB3KK305P13SGE6 |
| 1000 | 3.30                    | 57.5       | 45.0 | 30.0 | 32.0          | 1749.0    | 3.0                    | 45  | 530   | S     | FSB3KK335P13SGE6 |
| 1000 | 4.0                     | 57.5       | 50.0 | 35.0 | 38.0          | 2120.0    | 2.5                    | 48  | 530   | S     | FSB3KK405P17SGE6 |
| 1200 | 0.33                    | 42.0       | 40.0 | 20.0 | 13.0          | 330.0     | 10.9                   | 40  | 1000  | S     | FSB3BK334N11SCA6 |
| 1200 | 0.5                     | 42.0       | 40.0 | 20.0 | 16.0          | 470.0     | 7.7                    | 40  | 1000  | S     | FSB3BK474N11SCA6 |
| 1200 | 0.68                    | 42.0       | 40.0 | 20.0 | 19.0          | 680.0     | 5.4                    | 40  | 1000  | S     | FSB3BK684N11SCA6 |
| 1200 | 1.0                     | 42.0       | 37.0 | 28.0 | 25.0          | 1000.0    | 3.8                    | 36  | 1000  | S     | FSB3BK105N15SCA6 |
| 1200 | 1.20                    | 42.0       | 37.0 | 28.0 | 27.0          | 1200.0    | 3.2                    | 36  | 1000  | S     | FSB3BK125N15SCA6 |
| 1200 | 1.2                     | 42.0       | 35.5 | 33.5 | 28.0          | 1200.0    | 3.0                    | 36  | 1000  | S     | FSB3BK125N21SCA6 |
| 1200 | 1.50                    | 42.0       | 45.0 | 30.0 | 32.0          | 1500.0    | 2.6                    | 43  | 1000  | S     | FSB3BK155N18SCA6 |
| 1200 | 2.0                     | 57.5       | 45.0 | 30.0 | 27.0          | 1200.0    | 4.1                    | 45  | 600   | S     | FSB3BK205P13SGE6 |
| 1200 | 2.20                    | 57.5       | 45.0 | 30.0 | 28.0          | 1320.0    | 3.8                    | 45  | 600   | S     | FSB3BK225P13SGE6 |
| 1200 | 2.5                     | 57.5       | 45.0 | 30.0 | 30.0          | 1500.0    | 3.3                    | 45  | 600   | S     | FSB3BK255P13SGE6 |
| 1200 | 3.00                    | 57.5       | 50.0 | 35.0 | 35.0          | 1800.0    | 2.9                    | 48  | 600   | S     | FSB3BK305P17SGE6 |
| 1200 | 3.3                     | 57.5       | 50.0 | 35.0 | 38.0          | 1980.0    | 2.6                    | 48  | 600   | S     | FSB3BK335P17SGE6 |
| 2000 | 0.10                    | 42.0       | 40.0 | 20.0 | 8.0           | 140.0     | 26.8                   | 40  | 1400  | S     | FSB3DK104N11SCA6 |
| 2000 | 0.2                     | 42.0       | 40.0 | 20.0 | 10.0          | 210.0     | 17.9                   | 40  | 1400  | S     | FSB3DK154N11SCA6 |
| 2000 | 0.22                    | 42.0       | 40.0 | 20.0 | 12.0          | 308.0     | 12.3                   | 40  | 1400  | S     | FSB3DK224N11SCA6 |
| 2000 | 0.3                     | 42.0       | 40.0 | 20.0 | 16.0          | 462.0     | 8.3                    | 40  | 1400  | S     | FSB3DK334N11SCA6 |
| 2000 | 0.47                    | 42.0       | 40.0 | 20.0 | 19.0          | 658.0     | 5.9                    | 40  | 1400  | S     | FSB3DK474N11SCA6 |
| 2000 | 0.7                     | 42.0       | 44.0 | 24.0 | 24.0          | 952.0     | 4.1                    | 43  | 1400  | S     | FSB3DK684N13SCA6 |
| 2000 | 0.68                    | 42.0       | 35.5 | 33.5 | 25.0          | 952.0     | 4.0                    | 43  | 1400  | S     | FSB3DK684N21SCA6 |
| 2000 | 0.8                     | 42.0       | 45.0 | 30.0 | 28.0          | 1148.0    | 3.5                    | 43  | 1400  | S     | FSB3DK824N18SCA6 |
| 2000 | 1.00                    | 57.5       | 45.0 | 30.0 | 23.0          | 900.0     | 5.9                    | 45  | 900   | S     | FSB3DK105P13SGE6 |
| 2000 | 1.2                     | 57.5       | 45.0 | 30.0 | 25.0          | 1080.0    | 4.9                    | 45  | 900   | S     | FSB3DK125P13SGE6 |
| 2000 | 1.50                    | 57.5       | 50.0 | 35.0 | 30.0          | 1350.0    | 4.0                    | 48  | 900   | S     | FSB3DK155P17SGE6 |
| 850  | 0.5                     | 42.0       | 40.0 | 20.0 | 14.0          | 357.0     | 9.4                    | 40  | 760   | N     | FSB2PK474N11NCA6 |
| 850  | 0.68                    | 42.0       | 40.0 | 20.0 | 17.0          | 517.0     | 6.6                    | 40  | 760   | N     | FSB2PK684N11NCA6 |

# Double Metallized Polypropylene Film Snubber Capacitors

## FSB Series - 850 ~ 2000VDC (Lug Terminal)

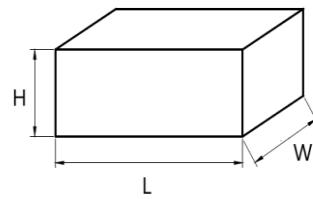


### Rating and Part Number

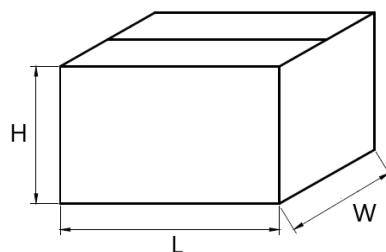
| Vdc  | Cap Value<br>μF | Dimensions |         |         | Irms             | Peak         | ESR <sub>Typical</sub> | ESL | dv/dt | Style | Part Number      |
|------|-----------------|------------|---------|---------|------------------|--------------|------------------------|-----|-------|-------|------------------|
|      |                 | W<br>mm    | H<br>mm | T<br>mm | 100KHz<br>70°C A | Current<br>A | 100KHz<br>mΩ           |     |       |       |                  |
| 850  | 1.0             | 42.0       | 40.0    | 20.0    | 20.0             | 760.0        | 4.6                    | 40  | 760   | N     | FSB2PK105N11NCA6 |
| 850  | 1.5             | 42.0       | 37.0    | 28.0    | 27.0             | 1140.0       | 3.1                    | 36  | 760   | N     | FSB2PK155N15NCA6 |
| 850  | 1.5             | 42.0       | 35.5    | 33.5    | 28.0             | 1140.0       | 3.0                    | 36  | 760   | N     | FSB2PK155N21NCA6 |
| 850  | 2.0             | 42.0       | 45.0    | 30.0    | 34.0             | 1520.0       | 2.4                    | 43  | 760   | N     | FSB2PK205N18NCA6 |
| 850  | 2.2             | 42.0       | 45.0    | 30.0    | 35.0             | 1672.0       | 2.2                    | 43  | 760   | N     | FSB2PK225N18NCA6 |
| 850  | 2.5             | 57.5       | 45.0    | 30.0    | 37.0             | 1175.0       | 2.0                    | 45  | 470   | N     | FSB2PK255P13NGE6 |
| 850  | 3.0             | 57.5       | 45.0    | 30.0    | 30.0             | 1410.0       | 3.5                    | 45  | 470   | N     | FSB2PK305P13NGE6 |
| 850  | 3.3             | 57.5       | 45.0    | 30.0    | 31.0             | 1551.0       | 3.2                    | 45  | 470   | N     | FSB2PK335P13NGE6 |
| 850  | 4.0             | 57.5       | 50.0    | 35.0    | 34.0             | 1880.0       | 2.6                    | 48  | 470   | N     | FSB2PK405P17NGE6 |
| 850  | 5.0             | 57.5       | 50.0    | 35.0    | 40.0             | 2350.0       | 2.2                    | 48  | 470   | N     | FSB2PK505P17NGE6 |
| 1000 | 0.5             | 42.0       | 40.0    | 20.0    | 14.0             | 400.0        | 8.7                    | 40  | 850   | N     | FSB3KK474N11NCA6 |
| 1000 | 0.7             | 42.0       | 40.0    | 20.0    | 18.0             | 578.0        | 6.1                    | 40  | 850   | N     | FSB3KK684N11NCA6 |
| 1000 | 1.0             | 42.0       | 40.0    | 20.0    | 20.0             | 850.0        | 4.3                    | 40  | 850   | N     | FSB3KK105N11NCA6 |
| 1000 | 1.5             | 42.0       | 37.0    | 28.0    | 28.0             | 1275.0       | 2.9                    | 36  | 850   | N     | FSB3KK155N15NCA6 |
| 1000 | 1.5             | 42.0       | 35.5    | 33.5    | 29.0             | 1275.0       | 2.8                    | 36  | 850   | N     | FSB3KK155N21NCA6 |
| 1000 | 2.0             | 42.0       | 45.0    | 30.0    | 35.0             | 1700.0       | 2.3                    | 43  | 850   | N     | FSB3KK205N18NCA6 |
| 1000 | 2.2             | 57.5       | 45.0    | 30.0    | 28.0             | 1166.0       | 4.4                    | 45  | 530   | N     | FSB3KK225P13NGE6 |
| 1000 | 2.5             | 57.5       | 45.0    | 30.0    | 29.0             | 1325.0       | 3.8                    | 45  | 530   | N     | FSB3KK255P13NGE6 |
| 1000 | 3.0             | 57.5       | 45.0    | 30.0    | 31.0             | 1590.0       | 3.2                    | 45  | 530   | N     | FSB3KK305P13NGE6 |
| 1000 | 3.3             | 57.5       | 45.0    | 30.0    | 32.0             | 1749.0       | 3.0                    | 45  | 530   | N     | FSB3KK335P13NGE6 |
| 1000 | 4.0             | 57.5       | 50.0    | 35.0    | 38.0             | 2120.0       | 2.5                    | 48  | 530   | N     | FSB3KK405P17NGE6 |
| 1200 | 0.3             | 42.0       | 40.0    | 20.0    | 13.0             | 330.0        | 10.9                   | 40  | 1000  | N     | FSB3BK334N11NCA6 |
| 1200 | 0.5             | 42.0       | 40.0    | 20.0    | 16.0             | 470.0        | 7.7                    | 40  | 1000  | N     | FSB3BK474N11NCA6 |
| 1200 | 0.7             | 42.0       | 40.0    | 20.0    | 19.0             | 680.0        | 5.4                    | 40  | 1000  | N     | FSB3BK684N11NCA6 |
| 1200 | 1.0             | 42.0       | 37.0    | 28.0    | 25.0             | 1000.0       | 3.8                    | 36  | 1000  | N     | FSB3BK105N15NCA6 |
| 1200 | 1.2             | 42.0       | 37.0    | 28.0    | 27.0             | 1200.0       | 3.2                    | 36  | 1000  | N     | FSB3BK125N15NCA6 |
| 1200 | 1.2             | 42.0       | 35.5    | 33.5    | 28.0             | 1200.0       | 3.0                    | 36  | 1000  | N     | FSB3BK125N21NCA6 |
| 1200 | 1.5             | 42.0       | 45.0    | 30.0    | 32.0             | 1500.0       | 2.6                    | 43  | 1000  | N     | FSB3BK155N18NCA6 |
| 1200 | 2.0             | 57.5       | 45.0    | 30.0    | 27.0             | 1200.0       | 4.1                    | 45  | 600   | N     | FSB3BK205P13NGE6 |
| 1200 | 2.2             | 57.5       | 45.0    | 30.0    | 28.0             | 1320.0       | 3.8                    | 45  | 600   | N     | FSB3BK225P13NGE6 |
| 1200 | 2.5             | 57.5       | 45.0    | 30.0    | 30.0             | 1500.0       | 3.3                    | 45  | 600   | N     | FSB3BK255P13NGE6 |
| 1200 | 3.0             | 57.5       | 50.0    | 35.0    | 35.0             | 1800.0       | 2.9                    | 48  | 600   | N     | FSB3BK305P17NGE6 |
| 1200 | 3.3             | 57.5       | 50.0    | 35.0    | 38.0             | 1980.0       | 2.6                    | 48  | 600   | N     | FSB3BK335P17NGE6 |
| 2000 | 0.1             | 42.0       | 40.0    | 20.0    | 8.0              | 140.0        | 26.8                   | 40  | 1400  | N     | FSB3DK104N11NCA6 |
| 2000 | 0.2             | 42.0       | 40.0    | 20.0    | 10.0             | 210.0        | 17.9                   | 40  | 1400  | N     | FSB3DK154N11NCA6 |
| 2000 | 0.2             | 42.0       | 40.0    | 20.0    | 12.0             | 308.0        | 12.3                   | 40  | 1400  | N     | FSB3DK224N11NCA6 |
| 2000 | 0.3             | 42.0       | 40.0    | 20.0    | 16.0             | 462.0        | 8.3                    | 40  | 1400  | N     | FSB3DK334N11NCA6 |
| 2000 | 0.5             | 42.0       | 40.0    | 20.0    | 19.0             | 658.0        | 5.9                    | 40  | 1400  | N     | FSB3DK474N11NCA6 |
| 2000 | 0.7             | 42.0       | 44.0    | 24.0    | 24.0             | 952.0        | 4.1                    | 43  | 1400  | N     | FSB3DK684N13NCA6 |
| 2000 | 0.7             | 42.0       | 35.5    | 33.5    | 25.0             | 952.0        | 4.0                    | 43  | 1400  | N     | FSB3DK684N21NCA6 |
| 2000 | 0.8             | 42.0       | 45.0    | 30.0    | 28.0             | 1148.0       | 3.5                    | 43  | 1400  | N     | FSB3DK824N18NCA6 |
| 2000 | 1.0             | 57.5       | 45.0    | 30.0    | 23.0             | 900.0        | 5.9                    | 45  | 900   | N     | FSB3DK105P13NGE6 |
| 2000 | 1.2             | 57.5       | 45.0    | 30.0    | 25.0             | 1080.0       | 4.9                    | 45  | 900   | N     | FSB3DK125P13NGE6 |
| 2000 | 1.5             | 57.5       | 50.0    | 35.0    | 30.0             | 1350.0       | 4.0                    | 48  | 900   | N     | FSB3DK155P17NGE6 |

## Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 25     |
| # 2                                   | 331    | 331   | 35     |
| # 3                                   | 331    | 331   | 50     |
| # 4                                   | 331    | 331   | 80     |
| # 5                                   | 350    | 170   | 35     |
| # 6                                   | 350    | 170   | 50     |
| # 7                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



## Packaging Quantity

| Size<br>Code | Dimension |           |      |           |      |           |
|--------------|-----------|-----------|------|-----------|------|-----------|
|              | W         | Tolerance | H    | Tolerance | T    | Tolerance |
| N11          | 42.0      | 0.8       | 40.0 | 0.8       | 20.0 | 0.8       |
| N13          | 42.0      | 0.8       | 44.0 | 0.8       | 24.0 | 0.8       |
| N15          | 42.0      | 0.8       | 37.0 | 0.8       | 28.0 | 0.8       |
| N18          | 42.0      | 0.8       | 45.0 | 0.8       | 30.0 | 0.8       |
| N21          | 42.5      | 0.8       | 35.5 | 0.8       | 33.5 | 0.8       |
| P13          | 57.5      | 1.0       | 45.0 | 1.0       | 30.0 | 1.0       |
| P17          | 57.5      | 1.0       | 50.0 | 1.0       | 35.0 | 1.0       |

## Overview

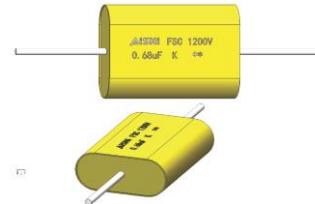
The FSC Series is a polypropylene metallized film and double-sided metallized film with polyester tape wrapping filled with resin and tinned copper wires.

## Applications

Widely used in high voltage, high frequency and pulse circuit and IGBT protection.

## Features

- High ripple current
- Self-healing property
- Low losses
- Small inherent temperature rise
- High contact reliability
- Suitable for high frequency applications



## Qualification

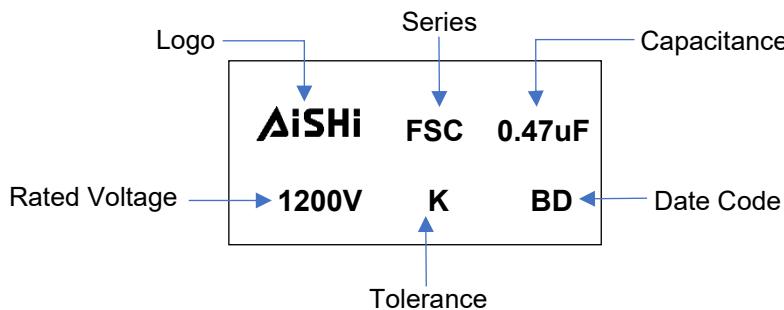
|                    |                      |
|--------------------|----------------------|
| Reference Standard | IEC 61071            |
| Climate Category   | 40/85/56 IEC 60068-1 |



## General Technical Data

|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film   |
| Voltage Range               | 600Vdc ~ 3000Vdc  |
| Capacitance Range           | 0.01µF ~ 4.7µF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C  |
| Operating Temperature Range | -40°C ~ +105°C<br>(+85°C observing voltage must be de-rating at 1.25% per °C)   |
| Climatic Category           | 40/85/56 IEC 60068-1  |
| Dissipation Factor          | 0.0010 (0.1%) at 25°C, 1KHz   |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 100 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 30 000 s |

## Marking



## Part Number System

| F              | SC                                      | 3B  | K                               | 474   | 046                              | XNL                          | B                               |
|----------------|---|---|---------------------------------|---|----------------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series                                  | Voltage (VDC)   | Tolerance                       | Capacitance (pF)  | Size Code (L)                    | Terminal Code                | Lead Length Code                |
| F = Film       | Snubber, Axial Type, Metallized PP Film | 600=2K<br>1000=3K<br>1200=3B<br>1600=3W<br>2000=3D<br>3000=3F | J = ±5%<br>K = ±10%<br>M = ±20% | First two digits = significant figures.<br>Third digit = Number of zeros. | 34mm=034<br>46mm=046<br>54mm=054 | Refer to Terminal Code Table | Refer to Lead Length Code Table |

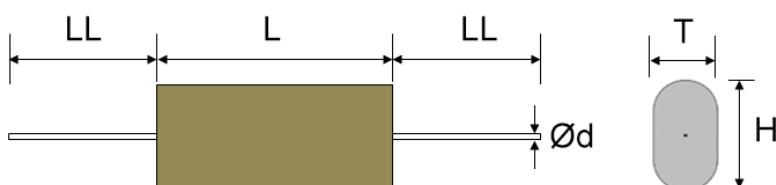
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| Axial Lead                        | X | NA                        | N | NA                                | L |
|                                   |   |                           |   |                                   |   |
|                                   |   |                           |   |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 20.0mm min  | L |
| 35.0mm min  | B |
| NA          | N |

## Dimension (mm)



# Double Metallized Polypropylene Film Snubber Capacitors

## FSC Series - 600 ~ 2000VDC (Oval Axial Type, 2 Leads)



### Rating and Part Number

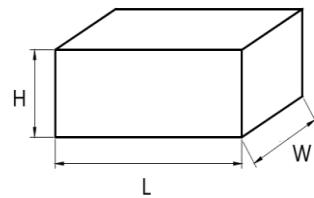
| Vdc  | Cap Value $\mu\text{F}$ | Dimensions  |             |             | Irms<br>100KHz<br>70°C A | Peak Current<br>A | ESR <sub>Typical</sub><br>100KHz<br>mΩ | ESL<br>nH | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|------|-------------------------|-------------|-------------|-------------|--------------------------|-------------------|--|-----------|---------------|-----------------|------------------|
|      |                         | L<br>mm max | H<br>mm max | T<br>mm max |                          |                   |  |           |               |                 |                  |
| 600  | 0.1                     | 34.0        | 12.0        | 6.0         | 3.0                      | 25.0              | 28.0                                   | 17        | 250           | 0.8             | FSC2KK104034XNLB |
| 600  | 0.15                    | 34.0        | 13.0        | 7.0         | 4.5                      | 37.5              | 13.0                                   | 18        | 250           | 0.8             | FSC2KK154034XNLB |
| 600  | 0.22                    | 34.0        | 14.5        | 8.0         | 5.0                      | 55.0              | 12.0                                   | 19        | 250           | 0.8             | FSC2KK224034XNLB |
| 600  | 0.33                    | 34.0        | 16.0        | 10.0        | 6.0                      | 82.5              | 9.0                                    | 19        | 250           | 0.8             | FSC2KK334034XNLB |
| 600  | 0.47                    | 34.0        | 18.0        | 12.0        | 7.5                      | 117.5             | 8.0                                    | 20        | 250           | 1.0             | FSC2KK474034XNLB |
| 600  | 0.68                    | 34.0        | 20.5        | 14.5        | 9.0                      | 170.0             | 6.0                                    | 21        | 250           | 1.0             | FSC2KK684034XNLB |
| 600  | 1.0                     | 34.0        | 23.5        | 17.5        | 10.0                     | 250.0             | 6.0                                    | 23        | 250           | 1.0             | FSC2KK105034XNLB |
| 600  | 1.5                     | 34.0        | 27.5        | 21.5        | 12.0                     | 375.0             | 5.0                                    | 24        | 250           | 1.2             | FSC2KK155034XNLB |
| 600  | 2.0                     | 46.0        | 27.5        | 18.5        | 13.0                     | 400.0             | 5.0                                    | 28        | 200           | 1.2             | FSC2KK205046XNLB |
| 600  | 3.3                     | 54.0        | 32.0        | 22.5        | 17.5                     | 495.0             | 4.0                                    | 34        | 150           | 1.2             | FSC2KK335054XNLB |
| 600  | 4.7                     | 54.0        | 33.5        | 28.5        | 19.0                     | 705.0             | 4.0                                    | 36        | 150           | 1.2             | FSC2KK475054XNLB |
| 850  | 0.15                    | 34.0        | 16.0        | 10.0        | 6.5                      | 112.5             | 8.0                                    | 19        | 750           | 0.8             | FSC2PK154034XNLB |
| 850  | 0.22                    | 34.0        | 18.0        | 11.5        | 7.0                      | 165.0             | 8.0                                    | 20        | 750           | 1.0             | FSC2PK224034XNLB |
| 850  | 0.33                    | 34.0        | 20.5        | 14.5        | 8.5                      | 247.5             | 7.0                                    | 21        | 750           | 1.0             | FSC2PK334034XNLB |
| 850  | 0.47                    | 34.0        | 23.5        | 17.0        | 11.0                     | 352.5             | 5.0                                    | 22        | 750           | 1.0             | FSC2PK474034XNLB |
| 850  | 0.68                    | 34.0        | 27.0        | 21.0        | 13.5                     | 510.0             | 4.0                                    | 24        | 750           | 1.2             | FSC2PK684034XNLB |
| 850  | 1.0                     | 46.0        | 27.0        | 17.5        | 13.0                     | 450.0             | 5.0                                    | 28        | 450           | 1.2             | FSC2PK105046XNLB |
| 850  | 1.5                     | 46.0        | 31.0        | 21.5        | 16.0                     | 675.0             | 4.0                                    | 30        | 450           | 1.2             | FSC2PK155046XNLB |
| 850  | 2.0                     | 46.0        | 34.5        | 25.0        | 20.0                     | 900.0             | 3.0                                    | 31        | 450           | 1.2             | FSC2PK205046XNLB |
| 850  | 2.2                     | 46.0        | 36.0        | 26.5        | 20.5                     | 990.0             | 3.0                                    | 32        | 450           | 1.2             | FSC2PK225046XNLB |
| 850  | 2.5                     | 46.0        | 38.0        | 28.5        | 21.5                     | 1,125.0           | 3.0                                    | 33        | 450           | 1.2             | FSC2PK255046XNLB |
| 1000 | 0.15                    | 34.0        | 17.5        | 11.5        | 7.5                      | 127.5             | 7.0                                    | 20        | 850           | 1.0             | FSC3KK154034XNLB |
| 1000 | 0.22                    | 34.0        | 20.0        | 13.5        | 8.0                      | 187.0             | 7.0                                    | 21        | 850           | 1.0             | FSC3KK224034XNLB |
| 1000 | 0.33                    | 34.0        | 23.0        | 17.0        | 10.0                     | 280.5             | 6.0                                    | 22        | 850           | 1.0             | FSC3KK334034XNLB |
| 1000 | 0.47                    | 34.0        | 26.5        | 20.0        | 12.0                     | 399.5             | 5.0                                    | 24        | 850           | 1.2             | FSC3KK474034XNLB |
| 1000 | 0.68                    | 34.0        | 30.5        | 24.5        | 13.0                     | 578.0             | 5.0                                    | 26        | 850           | 1.2             | FSC3KK684034XNLB |
| 1000 | 1.0                     | 46.0        | 30.0        | 20.5        | 14.0                     | 500.0             | 5.0                                    | 24        | 500           | 1.2             | FSC3KK105046XNLB |
| 1000 | 1.5                     | 46.0        | 35.0        | 25.5        | 17.5                     | 750.0             | 4.0                                    | 31        | 500           | 1.2             | FSC3KK155046XNLB |
| 1000 | 2.0                     | 46.0        | 39.0        | 30.0        | 22.0                     | 1,000.0           | 3.0                                    | 33        | 500           | 1.2             | FSC3KK205046XNLB |
| 1200 | 0.1                     | 34.0        | 18.0        | 12.0        | 7.0                      | 115.0             | 9.0                                    | 20        | 1,150         | 1.0             | FSC3BK104034XNLB |
| 1200 | 0.15                    | 34.0        | 21.0        | 14.5        | 8.5                      | 172.5             | 7.0                                    | 21        | 1,150         | 1.0             | FSC3BK154034XNLB |
| 1200 | 0.22                    | 34.0        | 24.0        | 17.5        | 9.5                      | 253.0             | 7.0                                    | 23        | 1,150         | 1.0             | FSC3BK224034XNLB |
| 1200 | 0.33                    | 46.0        | 24.0        | 14.5        | 10.0                     | 214.5             | 7.0                                    | 21        | 650           | 1.0             | FSC3BK334046XNLB |
| 1200 | 0.47                    | 46.0        | 27.0        | 18.0        | 11.0                     | 305.5             | 7.0                                    | 28        | 650           | 1.2             | FSC3BK474046XNLB |
| 1200 | 0.68                    | 46.0        | 31.0        | 22.0        | 13.0                     | 442.0             | 6.0                                    | 30        | 650           | 1.2             | FSC3BK684046XNLB |
| 1200 | 1.0                     | 46.0        | 36.0        | 27.0        | 16.0                     | 650.0             | 5.0                                    | 32        | 650           | 1.2             | FSC3BK105046XNLB |
| 1200 | 1.5                     | 54.0        | 40.5        | 27.5        | 20.0                     | 780.0             | 4.0                                    | 36        | 520           | 1.2             | FSC3BK155054XNLB |
| 1600 | 0.1                     | 34.0        | 20.5        | 14.5        | 8.5                      | 145.0             | 7.0                                    | 21        | 1,450         | 1.0             | FSC3WK104034XNLB |
| 1600 | 0.15                    | 34.0        | 24.0        | 18.0        | 11.0                     | 217.5             | 5.0                                    | 23        | 1,450         | 1.0             | FSC3WK154034XNLB |
| 1600 | 0.22                    | 34.0        | 28.0        | 21.5        | 10.5                     | 319.0             | 7.0                                    | 24        | 1,450         | 1.2             | FSC3WK224034XNLB |
| 1600 | 0.33                    | 46.0        | 27.5        | 18.5        | 11.0                     | 264.0             | 7.0                                    | 23        | 800           | 1.2             | FSC3WK334046XNLB |
| 1600 | 0.47                    | 46.0        | 31.5        | 22.0        | 13.0                     | 376.0             | 6.0                                    | 30        | 800           | 1.2             | FSC3WK474046XNLB |
| 1600 | 0.68                    | 46.0        | 36.5        | 27.0        | 14.5                     | 544.0             | 6.0                                    | 32        | 800           | 1.2             | FSC3WK684046XNLB |
| 1600 | 1.0                     | 46.0        | 42.5        | 33.0        | 18.0                     | 800.0             | 5.0                                    | 35        | 800           | 1.2             | FSC3WK105046XNLB |
| 1600 | 1.5                     | 54.0        | 47.0        | 34.5        | 22.5                     | 975.0             | 4.0                                    | 39        | 650           | 1.2             | FSC3WK155054XNLB |
| 2000 | 0.022                   | 34.0        | 14.5        | 8.0         | 3.0                      | 38.5              | 35.0                                   | 18        | 1,750         | 0.8             | FSC3DK223034XNLB |
| 2000 | 0.033                   | 34.0        | 16.0        | 10.0        | 4.0                      | 57.8              | 20.0                                   | 19        | 1,750         | 0.8             | FSC3DK333034XNLB |
| 2000 | 0.047                   | 34.0        | 18.0        | 11.5        | 6.0                      | 82.3              | 12.0                                   | 20        | 1,750         | 1.0             | FSC3DK473034XNLB |

### Rating and Part Number

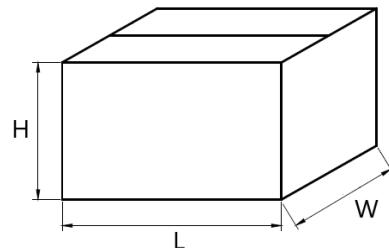
| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |        |        | Irms<br>100KHz<br>70°C A | Peak Current<br>A | ESR <sub>Typical</sub><br>100KHz<br>mΩ | ESL<br>nH | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|------|-------------------------|------------|--------|--------|--------------------------|-------------------|--|-----------|---------------|-----------------|------------------|
|      |                         | L          | H      | T      |                          |                   |  |           |               |                 |                  |
|      |                         | mm max     | mm max | mm max |                          |                   |  |           |               |                 |                  |
| 2000 | 0.068                   | 34.0       | 20.5   | 14.0   | 8.0                      | 119.0             | 8.0                                    | 21        | 1,750         | 1.0             | FSC3DK683034XNLB |
| 2000 | 0.10                    | 34.0       | 23.5   | 17.0   | 9.0                      | 175.0             | 7.0                                    | 22        | 1,750         | 1.0             | FSC3DK104034XNLB |
| 2000 | 0.15                    | 46.0       | 23.5   | 14.0   | 10.0                     | 144.0             | 7.0                                    | 21        | 960           | 1.0             | FSC3DK154046XNLB |
| 2000 | 0.22                    | 46.0       | 27.0   | 17.5   | 10.5                     | 211.2             | 8.0                                    | 28        | 960           | 1.0             | FSC3DK224046XNLB |
| 2000 | 0.33                    | 46.0       | 31.5   | 22.0   | 11.5                     | 316.8             | 8.0                                    | 30        | 960           | 1.2             | FSC3DK334046XNLB |
| 2000 | 0.47                    | 46.0       | 36.0   | 26.5   | 14.5                     | 451.2             | 6.0                                    | 32        | 960           | 1.2             | FSC3DK474046XNLB |
| 2000 | 0.56                    | 54.0       | 36.5   | 24.0   | 14.0                     | 425.6             | 7.0                                    | 31        | 760           | 1.2             | FSC3DK564054XNLB |
| 2000 | 0.68                    | 54.0       | 39.5   | 27.0   | 16.0                     | 516.8             | 6.0                                    | 35        | 760           | 1.2             | FSC3DK684054XNLB |
| 2000 | 1.0                     | 54.0       | 45.5   | 33.0   | 19.5                     | 760.0             | 5.0                                    | 38        | 760           | 1.2             | FSC3DK105054XNLB |
| 3000 | 0.01                    | 34.0       | 14.0   | 8.0    | 2.5                      | 26.0              | 60.0                                   | 18        | 2,600         | 0.8             | FSC3FK103034XNLB |
| 3000 | 0.015                   | 34.0       | 16.0   | 9.5    | 3.0                      | 39.0              | 40.0                                   | 19        | 2,600         | 0.8             | FSC3FK153034XNLB |
| 3000 | 0.022                   | 34.0       | 18.0   | 11.5   | 4.0                      | 57.2              | 25.0                                   | 20        | 2,600         | 1.0             | FSC3FK223034XNLB |
| 3000 | 0.033                   | 34.0       | 20.5   | 14.5   | 6.0                      | 85.8              | 14.0                                   | 21        | 2,600         | 1.0             | FSC3FK333034XNLB |
| 3000 | 0.047                   | 46.0       | 21.0   | 11.5   | 6.5                      | 70.5              | 14.0                                   | 20        | 1,500         | 1.0             | FSC3FK473046XNLB |
| 3000 | 0.068                   | 46.0       | 23.5   | 14.0   | 7.5                      | 102.0             | 12.0                                   | 26        | 1,500         | 1.0             | FSC3FK683046XNLB |
| 3000 | 0.10                    | 46.0       | 26.5   | 17.0   | 9.0                      | 150.0             | 10.0                                   | 28        | 1,500         | 1.2             | FSC3FK104046XNLB |
| 3000 | 0.15                    | 46.0       | 31.0   | 21.5   | 11.5                     | 225.0             | 8.0                                    | 30        | 1,500         | 1.2             | FSC3FK154046XNLB |

## Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 8                                   | 425    | 185   | 105    |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 3                                   | 445    | 400   | 250    |



## Overview

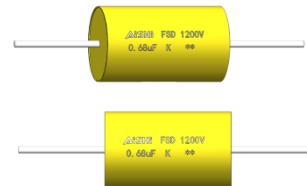
The FSD Series is a polypropylene metallized film and double-sided metallized film with polyester tape wrapping filled with resin and tinned copper wires.

## Applications

Widely used in high voltage, high frequency, pulse circuit and IGBT protection.

## Features

- High ripple current
- Self-healing property
- Low losses
- Small inherent temperature rise
- High contact reliability
- Suitable for high frequency applications



## Qualification

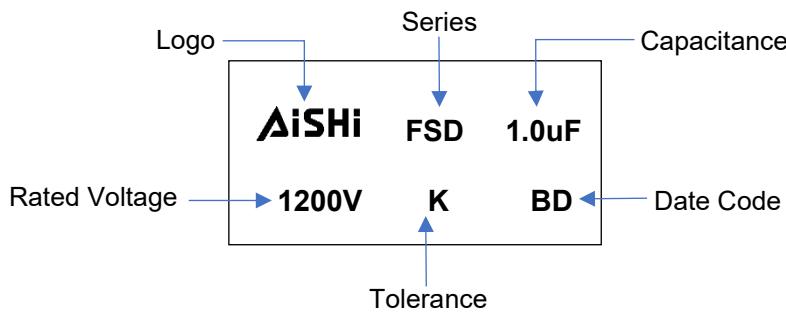
|                    |                      |
|--------------------|----------------------|
| Reference Standard | IEC 61071            |
| Climate Category   | 40/85/56 IEC 60068-1 |



## General Technical Data

|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film   |
| Voltage Range               | 850Vdc ~ 2000Vdc  |
| Capacitance Range           | 0.047μF ~ 4.7μF   |
| Capacitance Tolerance       | ±5% or ±10% at +25°C  |
| Operating Temperature Range | -40°C ~ +105°C<br>(+85°C observing voltage must be de-rating at 1.25% per °C)   |
| Climatic Category           | 40/85/56 IEC 60068-1  |
| Dissipation Factor          | 0.0010 (0.1%) at 25°C, 1KHz   |
| Insulation Resistance       | R between leads, for C ≤ 0.33 μF at 100 V; 1 min > 100 000 MΩ<br>RC between leads, for C > 0.33 μF at 100 V; 1 min > 30 000 s |

## Marking



## Part Number System

| <b>F</b>       | <b>SD</b>                        | <b>3B</b>   | <b>K</b>            | <b>474</b>  | <b>046</b>                       | <b>XNL</b>                   | <b>N</b>                        |
|----------------|----------------------------------|---|---------------------|---|----------------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series                           | Voltage (VDC)   | Tolerance           | Capacitance (pF)  | Size Code (L)                    | Terminal Code                | Lead Length Code                |
| F = Film       | Snubber Type, Metallized PP Film | 850=2P<br>1000=3K<br>1200=3B<br>1600=3W<br>2000=3D<br>3000=3F | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | 34mm=034<br>46mm=046<br>58mm=058 | Refer to Terminal Code Table | Refer to Lead Length Code Table |

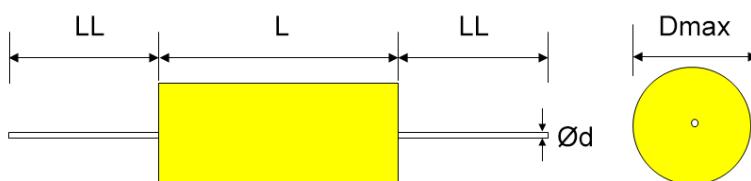
## Terminal Code

| Digit One (Lead/Terminal Type) |   | Digit Two (Lead Space) |   | Digit Three (Lead Ipsilateral) |   |
|--------------------------------|---|------------------------|---|--------------------------------|---|
| Axial Lead                     | X | NA                     | N | NA                             | L |
|                                |   |                        |   |                                |   |
|                                |   |                        |   |                                |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 20.0mm min  | L |
| 35.0mm min  | B |
| NA          | N |

## Dimension (mm)



## Rating and Part Number

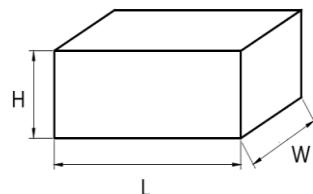
| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |        | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHz | ESL | dv/dt | Lead Wire | Part Number      |
|------|-------------------------|------------|--------|----------------|--------------|----------------------------------|-----|-------|-----------|------------------|
|      |                         | D          | L      |                |              |                                  |     |       |           |                  |
|      |                         | mm max     | mm max | 70°C A         | A            | mΩ                               | nH  | V/us  | mm        |                  |
| 850  | 0.22                    | 14.5       | 34.0   | 8.0            | 264.0        | 9.4                              | 22  | 1200  | 1.0       | FSD2PK224034XNLB |
| 850  | 0.22                    | 12.0       | 46.0   | 7.0            | 154.0        | 11.3                             | 26  | 700   | 0.8       | FSD2PK224046XNLB |
| 850  | 0.33                    | 17.5       | 34.0   | 9.0            | 396.0        | 8.8                              | 22  | 1200  | 1.0       | FSD2PK334034XNLB |
| 850  | 0.33                    | 14.0       | 46.0   | 10.0           | 231.0        | 8.7                              | 26  | 700   | 1.0       | FSD2PK334046XNLB |
| 850  | 0.47                    | 20.5       | 34.0   | 11.0           | 564.0        | 5.7                              | 22  | 1200  | 1.0       | FSD2PK474034XNLB |
| 850  | 0.47                    | 16.5       | 46.0   | 9.0            | 329.0        | 7.2                              | 26  | 700   | 1.0       | FSD2PK474046XNLB |
| 850  | 0.68                    | 19.5       | 46.0   | 13.0           | 476.0        | 4.6                              | 26  | 700   | 1.0       | FSD2PK684046XNLB |
| 850  | 1.0                     | 23.0       | 46.0   | 13.0           | 700.0        | 4.7                              | 26  | 700   | 1.0       | FSD2PK105046XNLB |
| 850  | 1.5                     | 28.5       | 46.0   | 13.0           | 1050.0       | 4.0                              | 26  | 700   | 1.2       | FSD2PK155046XNLB |
| 850  | 2.0                     | 32.0       | 46.0   | 13.0           | 1400.0       | 4.3                              | 26  | 700   | 1.2       | FSD2PK205046XNLB |
| 850  | 2.2                     | 33.5       | 46.0   | 14.0           | 1540.0       | 3.3                              | 26  | 700   | 1.2       | FSD2PK225046XNLB |
| 850  | 2.2                     | 28.5       | 58.0   | 12.0           | 990.0        | 4.0                              | 32  | 450   | 1.2       | FSD2PK225058XNLB |
| 850  | 2.5                     | 35.5       | 46.0   | 15.0           | 1750.0       | 3.7                              | 26  | 700   | 1.2       | FSD2PK255046XNLB |
| 850  | 2.5                     | 30.0       | 58.0   | 15.0           | 1125.0       | 4.0                              | 32  | 450   | 1.2       | FSD2PK255058XNLB |
| 850  | 3.0                     | 32.5       | 58.0   | 15.0           | 1350.0       | 3.7                              | 32  | 450   | 1.2       | FSD2PK305058XNLB |
| 850  | 3.3                     | 34.0       | 58.0   | 15.0           | 1485.0       | 3.3                              | 32  | 450   | 1.2       | FSD2PK335058XNLB |
| 850  | 4.0                     | 37.5       | 58.0   | 15.0           | 1800.0       | 3.3                              | 32  | 450   | 1.2       | FSD2PK405058XNLB |
| 850  | 4.7                     | 40.0       | 58.0   | 15.0           | 2115.0       | 2.9                              | 32  | 450   | 1.2       | FSD2PK475058XNLB |
| 1000 | 0.22                    | 16.5       | 34.0   | 8.0            | 286.0        | 8.5                              | 22  | 1300  | 1.0       | FSD3KK224034XNLB |
| 1000 | 0.33                    | 20.0       | 34.0   | 9.0            | 429.0        | 6.5                              | 22  | 1300  | 1.0       | FSD3KK334034XNLB |
| 1000 | 0.33                    | 16.0       | 46.0   | 8.0            | 264.0        | 8.3                              | 26  | 800   | 1.0       | FSD3KK334046XNLB |
| 1000 | 0.47                    | 23.5       | 34.0   | 10.0           | 611.0        | 5.4                              | 22  | 1300  | 1.0       | FSD3KK474034XNLB |
| 1000 | 0.47                    | 18.5       | 46.0   | 9.0            | 376.0        | 6.7                              | 26  | 800   | 1.0       | FSD3KK474046XNLB |
| 1000 | 0.68                    | 22.0       | 46.0   | 12.0           | 544.0        | 5.7                              | 26  | 800   | 1.0       | FSD3KK684046XNLB |
| 1000 | 1.0                     | 26.5       | 46.0   | 12.0           | 800.0        | 4.6                              | 26  | 800   | 1.2       | FSD3KK105046XNLB |
| 1000 | 1.5                     | 32.0       | 46.0   | 13.0           | 1200.0       | 5.2                              | 26  | 800   | 1.2       | FSD3KK155046XNLB |
| 1000 | 1.5                     | 27.0       | 58.0   | 12.0           | 750.0        | 5.6                              | 32  | 500   | 1.2       | FSD3KK155058XNLB |
| 1000 | 2.0                     | 31.0       | 58.0   | 15.0           | 1000.0       | 4.3                              | 32  | 500   | 1.2       | FSD3KK205058XNLB |
| 1000 | 2.2                     | 32.0       | 58.0   | 15.0           | 1100.0       | 3.9                              | 32  | 500   | 1.2       | FSD3KK225058XNLB |
| 1000 | 3.0                     | 37.5       | 58.0   | 15.0           | 1500.0       | 3.4                              | 32  | 500   | 1.2       | FSD3KK305058XNLB |
| 1000 | 3.3                     | 39.0       | 58.0   | 15.0           | 1650.0       | 3.1                              | 32  | 500   | 1.2       | FSD3KK335058XNLB |
| 1200 | 0.22                    | 18.0       | 34.0   | 9.0            | 330.0        | 7.7                              | 22  | 1500  | 1.0       | FSD3BK224034XNLB |
| 1200 | 0.22                    | 14.5       | 46.0   | 8.0            | 198.0        | 11.0                             | 26  | 900   | 1.0       | FSD3BK224046XNLB |
| 1200 | 0.33                    | 22.0       | 34.0   | 10.0           | 495.0        | 6.6                              | 22  | 1500  | 1.0       | FSD3BK334034XNLB |
| 1200 | 0.33                    | 17.5       | 46.0   | 9.0            | 297.0        | 7.7                              | 26  | 900   | 1.0       | FSD3BK334046XNLB |
| 1200 | 0.47                    | 24.0       | 46.0   | 10.0           | 423.0        | 6.8                              | 26  | 900   | 1.2       | FSD3BK474046XNLB |
| 1200 | 0.68                    | 26.0       | 46.0   | 12.0           | 612.0        | 5.8                              | 26  | 900   | 1.2       | FSD3BK684046XNLB |
| 1200 | 1.0                     | 29.0       | 46.0   | 11.0           | 900.0        | 5.0                              | 26  | 900   | 1.2       | FSD3BK105046XNLB |
| 1200 | 1.0                     | 24.5       | 58.0   | 10.0           | 550.0        | 5.5                              | 32  | 550   | 1.2       | FSD3BK105058XNLB |
| 1200 | 1.2                     | 32.0       | 46.0   | 11.0           | 1080.0       | 4.4                              | 26  | 900   | 1.2       | FSD3BK125046XNLB |
| 1200 | 1.2                     | 26.5       | 58.0   | 10.0           | 660.0        | 4.8                              | 32  | 550   | 1.2       | FSD3BK125058XNLB |
| 1200 | 1.5                     | 35.5       | 46.0   | 14.0           | 1350.0       | 3.9                              | 26  | 900   | 1.2       | FSD3BK155046XNLB |
| 1200 | 1.5                     | 29.5       | 58.0   | 13.0           | 825.0        | 4.4                              | 32  | 550   | 1.2       | FSD3BK155058XNLB |
| 1200 | 2.0                     | 33.0       | 58.0   | 15.0           | 1100.0       | 3.9                              | 32  | 550   | 1.2       | FSD3BK205058XNLB |
| 1200 | 2.2                     | 35.5       | 58.0   | 15.0           | 1210.0       | 3.7                              | 32  | 550   | 1.2       | FSD3BK225058XNLB |
| 1200 | 3.0                     | 41.0       | 58.0   | 15.0           | 1650.0       | 3.1                              | 32  | 550   | 1.2       | FSD3BK305058XNLB |
| 2000 | 0.047                   | 14.0       | 34.0   | 5.0            | 56.4         | 30.0                             | 26  | 1200  | 0.8       | FSD3DK473034XNLB |
| 2000 | 0.047                   | 11.0       | 46.0   | 5.0            | 56.4         | 30.0                             | 26  | 1200  | 0.8       | FSD3DK473046XNLB |

## Rating and Part Number

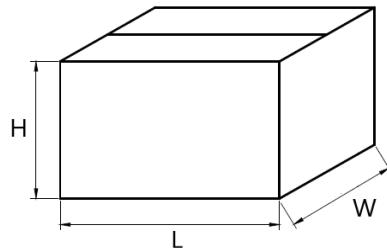
| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |        | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHz | ESL | dv/dt | Lead Wire | Part Number      |
|------|-------------------------|------------|--------|----------------|--------------|----------------------------------|-----|-------|-----------|------------------|
|      |                         | D          | L      |                |              |                                  |     |       |           |                  |
|      |                         | mm max     | mm max | 70°C A         | A            | mΩ                               | nH  | V/us  | mm        |                  |
| 2000 | 0.068                   | 16.0       | 34.0   | 7.0            | 136.0        | 16.8                             | 22  | 2000  | 1.0       | FSD3DK683034XNLB |
| 2000 | 0.068                   | 13.0       | 46.0   | 6.0            | 81.6         | 23.3                             | 26  | 1200  | 1.0       | FSD3DK683046XNLB |
| 2000 | 0.10                    | 19.0       | 34.0   | 10.0           | 200.0        | 12.0                             | 22  | 2000  | 1.0       | FSD3DK104034XNLB |
| 2000 | 0.10                    | 15.5       | 46.0   | 9.0            | 120.0        | 17.7                             | 26  | 1200  | 1.0       | FSD3DK104046XNLB |
| 2000 | 0.15                    | 18.5       | 46.0   | 12.0           | 180.0        | 9.5                              | 26  | 1200  | 1.0       | FSD3DK154046XNLB |
| 2000 | 0.22                    | 21.5       | 46.0   | 13.0           | 264.0        | 8.6                              | 26  | 1200  | 1.0       | FSD3DK224046XNLB |
| 2000 | 0.33                    | 26.5       | 46.0   | 14.0           | 396.0        | 6.7                              | 26  | 1200  | 1.2       | FSD3DK334046XNLB |
| 2000 | 0.47                    | 32.0       | 46.0   | 14.0           | 564.0        | 5.6                              | 26  | 1200  | 1.2       | FSD3DK474046XNLB |
| 2000 | 0.56                    | 34.5       | 46.0   | 15.0           | 672.0        | 5.2                              | 26  | 1200  | 1.2       | FSD3DK564046XNLB |
| 2000 | 0.56                    | 29.0       | 58.0   | 15.0           | 392.0        | 6.5                              | 32  | 700   | 1.2       | FSD3DK564058XNLB |
| 2000 | 0.68                    | 31.0       | 58.0   | 15.0           | 476.0        | 5.7                              | 32  | 700   | 1.2       | FSD3DK684058XNLB |
| 2000 | 1.0                     | 37.5       | 58.0   | 15.0           | 700.0        | 4.7                              | 32  | 700   | 1.2       | FSD3DK105058XNLB |
| 2000 | 1.2                     | 40.5       | 58.0   | 15.0           | 840.0        | 4.3                              | 32  | 700   | 1.2       | FSD3DK125058XNLB |

## Packaging Information

| Inner Box Specifications (Dimensions) |                    |                    |                    |
|---------------------------------------|--------------------|--------------------|--------------------|
| Box #                                 | L $\pm 3\text{mm}$ | W $\pm 3\text{mm}$ | H $\pm 3\text{mm}$ |
| # 8                                   | 425                | 185                | 105                |



| Outer Box Specifications (Dimensions) |                    |                    |                    |
|---------------------------------------|--------------------|--------------------|--------------------|
| Box #                                 | L $\pm 5\text{mm}$ | W $\pm 5\text{mm}$ | H $\pm 5\text{mm}$ |
| # 3                                   | 445                | 400                | 250                |



## Overview

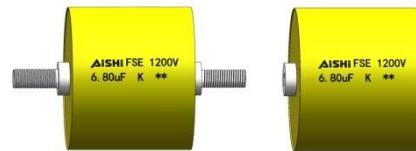
The FSE Series is a polypropylene metallized film and double-sided metallized film with flame retardation plastic case or polyester tape wrapping filled with resin and terminals.

## Applications

Widely used in high voltage, high frequency and pulse circuit and IGBT protection.

## Features

- High ripple current
- Self-healing property
- Low losses
- Small inherent temperature rise
- High contact reliability
- Suitable for high frequency applications



## Qualification

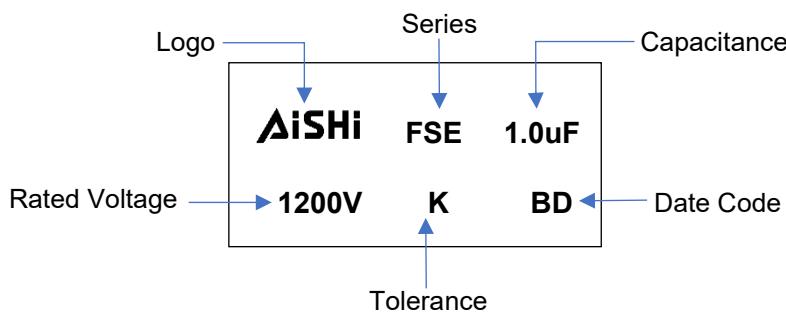
|                    |                      |
|--------------------|----------------------|
| Reference Standard | IEC 61071            |
| Climate Category   | 40/85/56 IEC 60068-1 |



## General Technical Data

|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film   |
| Voltage Range               | 1000Vdc ~ 3000Vdc   |
| Capacitance Range           | 0.5μF ~ 12.0μF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C  |
| Operating Temperature Range | -40°C ~ +105°C<br>(+85°C observing voltage must be de-rating at 1.25% per °C)   |
| Climatic Category           | 40/85/56 IEC 60068-1  |
| Dissipation Factor          | 0.0010 (0.1%) at 25°C, 1KHz   |
| Insulation Resistance       | R between leads, for C ≤ 0.33 μF at 100 V; 1 min > 100 000 MΩ<br>RC between leads, for C > 0.33 μF at 100 V; 1 min > 30 000 s |

## Marking



## Part Number System

| F              | SE                                    | 3B                                       | K                   | 105   | 037  | FN6                          | 5                               |
|----------------|---------------------------------------|--|---------------------|---|--|------------------------------|---------------------------------|
| Capacitor Type | Series                                | Voltage (VDC)                            | Tolerance           | Capacitance (pF)  | Size Code (L)                                | Terminal Code                | Lead Length Code                |
| F = Film       | Snubber, GTO Type, Metallized PP Film | 1000=3K<br>1200=3B<br>2000=3D<br>3000=3F | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | 37mm=037<br>40mm=040<br>50mm=050<br>64mm=064 | Refer to Terminal Code Table | Refer to Lead Length Code Table |

## Terminal Code

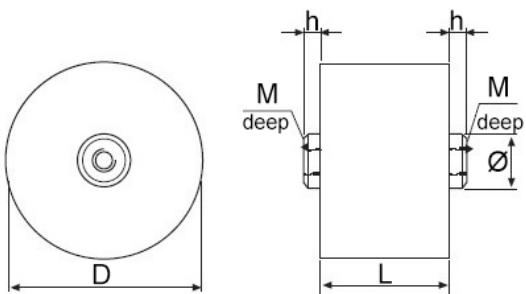
| Digit One (Lead/Terminal Type) |   | Digit Two (Lead Space) |   | Digit Three (Terminal Size) |   |
|--------------------------------|---|------------------------|---|-----------------------------|---|
| Male terminal                  | M | NA                     | N | M5*8                        | 5 |
| Female terminal                | F |                        |   | M6*8                        | 6 |
|                                |   |                        |   | M8*8                        | 8 |
|                                |   |                        |   | M10*8                       | H |
|                                |   |                        |   | M12*8                       | J |

## Lead Length Code

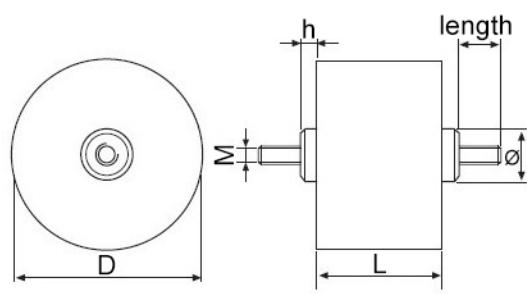
| Lead Length |
|-------------|
| 5mm=5       |
| 20mm=20     |
|             |
|             |
|             |

## Dimension (mm)

Thread hole type



Bolt type

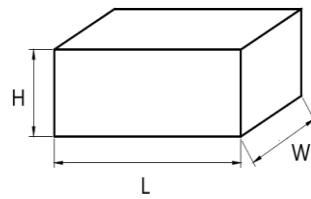


## Rating and Part Number

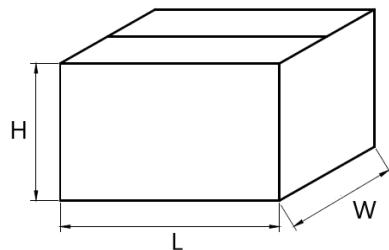
| Vdc  | Cap Value $\mu\text{F}$ | Dimensions |        | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHz | Rth  | dv/dt | Output | Part Number      |
|------|-------------------------|------------|--------|----------------|--------------|----------------------------------|------|-------|--------|------------------|
|      |                         | D          | L      |                |              |                                  |      |       |        |                  |
|      |                         | mm max     | mm max | 70°C A         | A            | mΩ                               | k/W  | V/us  |        |                  |
| 1000 | 1.5                     | 45.0       | 37.0   | 43.0           | 825.0        | 1.0                              | 11.0 | 550   | M6*8   | FSE3KK155037FN65 |
| 1000 | 3                       | 56.0       | 40.0   | 55.0           | 1,500.0      | 0.8                              | 7.4  | 500   | M6*8   | FSE3KK305040FN65 |
| 1000 | 4                       | 65.0       | 40.0   | 65.0           | 2,000.0      | 0.8                              | 6.0  | 500   | M6*8   | FSE3KK405040FN65 |
| 1000 | 5                       | 72.0       | 40.0   | 70.0           | 2,500.0      | 0.7                              | 5.0  | 500   | M8*8   | FSE3KK505040FN85 |
| 1000 | 6                       | 78.0       | 40.0   | 80.0           | 3,000.0      | 0.7                              | 4.5  | 500   | M8*8   | FSE3KK605040FN85 |
| 1000 | 7                       | 84.0       | 40.0   | 85.0           | 3,500.0      | 0.6                              | 4.0  | 500   | M8*8   | FSE3KK705040FN85 |
| 1000 | 8                       | 75.0       | 50.0   | 85.0           | 3,600.0      | 0.6                              | 4.0  | 450   | M8*8   | FSE3KK805050FN85 |
| 1000 | 10                      | 86.0       | 50.0   | 88.0           | 4,500.0      | 0.7                              | 3.5  | 450   | M8*8   | FSE3KK106050FN85 |
| 1000 | 12                      | 86.0       | 50.0   | 95.0           | 5,400.0      | 0.7                              | 3.5  | 450   | M8*8   | FSE3KK126050FN85 |
| 1200 | 1                       | 45.0       | 37.0   | 40.0           | 700.0        | 1.2                              | 11.5 | 700   | M6*8   | FSE3BK105037FN65 |
| 1200 | 2                       | 52.0       | 40.0   | 45.0           | 1,200.0      | 1.0                              | 8.5  | 600   | M6*8   | FSE3BK205040FN65 |
| 1200 | 3                       | 62.0       | 40.0   | 60.0           | 1,800.0      | 0.8                              | 6.5  | 600   | M6*8   | FSE3BK305040FN65 |
| 1200 | 4                       | 72.0       | 40.0   | 70.0           | 2,400.0      | 0.7                              | 5.0  | 600   | M8*8   | FSE3BK405040FN85 |
| 1200 | 5                       | 80.0       | 40.0   | 80.0           | 3,000.0      | 0.7                              | 4.5  | 600   | M8*8   | FSE3BK505040FN85 |
| 1200 | 6                       | 86.0       | 40.0   | 85.0           | 3,600.0      | 0.7                              | 4.0  | 600   | M8*8   | FSE3BK605040FN85 |
| 1200 | 8                       | 86.0       | 50.0   | 90.0           | 4,000.0      | 0.7                              | 3.8  | 500   | M8*8   | FSE3BK805050FN85 |
| 1200 | 10                      | 86.0       | 50.0   | 95.0           | 5,000.0      | 0.7                              | 3.5  | 500   | M8*8   | FSE3BK106050FN85 |
| 2000 | 0.5                     | 45.0       | 37.0   | 35.0           | 600.0        | 1.5                              | 12.0 | 1,200 | M6*8   | FSE3DK504037FN65 |
| 2000 | 1                       | 56.0       | 40.0   | 50.0           | 1,200.0      | 1.2                              | 7.5  | 1,200 | M6*8   | FSE3DK105040FN65 |
| 2000 | 1.5                     | 68.0       | 40.0   | 60.0           | 1,800.0      | 1.0                              | 5.5  | 1,200 | M6*8   | FSE3DK155040FN65 |
| 2000 | 2                       | 78.0       | 40.0   | 75.0           | 2,400.0      | 0.9                              | 4.5  | 1,200 | M8*8   | FSE3DK205040FN85 |
| 2000 | 2.5                     | 88.0       | 40.0   | 80.0           | 3,000.0      | 0.8                              | 4.0  | 1,200 | M8*8   | FSE3DK255040FN85 |
| 2000 | 3                       | 82.0       | 50.0   | 80.0           | 2,550.0      | 0.8                              | 4.0  | 850   | M8*8   | FSE3DK305050FN85 |
| 2000 | 4                       | 86.0       | 50.0   | 85.0           | 3,400.0      | 0.8                              | 3.5  | 850   | M8*8   | FSE3DK405050FN85 |
| 3000 | 0.68                    | 50.0       | 50.0   | 35.0           | 816.0        | 2.5                              | 12.0 | 1,200 | M6*8   | FSE3FK684037FN65 |
| 3000 | 0.75                    | 52.0       | 50.0   | 45.0           | 900.0        | 2.0                              | 7.5  | 1,200 | M6*8   | FSE3FK754050FN65 |
| 3000 | 1                       | 60.0       | 50.0   | 50.0           | 1,200.0      | 1.5                              | 5.5  | 1,200 | M6*8   | FSE3FK105050FN65 |
| 3000 | 1.2                     | 67.0       | 50.0   | 60.0           | 1,440.0      | 1.4                              | 4.5  | 1,200 | M8*8   | FSE3FK125050FN85 |
| 3000 | 1.5                     | 73.0       | 50.0   | 65.0           | 1,800.0      | 1.2                              | 4.0  | 1,200 | M8*8   | FSE3FK155050FN85 |
| 3000 | 2                       | 85.0       | 50.0   | 70.0           | 2,400.0      | 1.0                              | 4.0  | 1,200 | M8*8   | FSE3FK205050FN85 |
| 3000 | 2.5                     | 93.0       | 50.0   | 85.0           | 3,000.0      | 0.9                              | 3.5  | 1,200 | M8*8   | FSE3FK255050FN85 |
| 3000 | 0.68                    | 38.0       | 64.0   | 30.0           | 578.0        | 4.0                              | 14.5 | 850   | M6*8   | FSE3FK684064FN85 |
| 3000 | 1                       | 45.0       | 64.0   | 40.0           | 850.0        | 3.0                              | 8.5  | 850   | M6*8   | FSE3FK105064FN85 |
| 3000 | 1.5                     | 55.0       | 64.0   | 55.0           | 1,275.0      | 2.0                              | 6.5  | 850   | M6*8   | FSE3FK155064FN85 |
| 3000 | 2                       | 63.0       | 64.0   | 60.0           | 1,700.0      | 1.5                              | 5.5  | 850   | M8*8   | FSE3FK205064FN85 |
| 3000 | 2.5                     | 70.0       | 64.0   | 70.0           | 2,125.0      | 1.4                              | 5.0  | 850   | M8*8   | FSE3FK255064FN85 |
| 3000 | 3                       | 76.0       | 64.0   | 85.0           | 2,550.0      | 1.2                              | 4.0  | 850   | M8*8   | FSE3FK305064FN85 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 25     |
| # 2                                   | 331    | 331   | 35     |
| # 3                                   | 331    | 331   | 50     |
| # 4                                   | 331    | 331   | 80     |
| # 5                                   | 350    | 170   | 35     |
| # 6                                   | 350    | 170   | 50     |
| # 7                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 265    |



## Overview

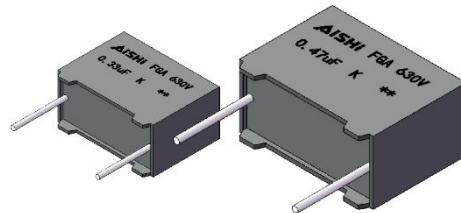
The FGA series is constructed of metallized polypropylene film encapsulated in plastic cases, sealed with epoxy resin.

## Applications

Widely used in power supplies, power factory correction, ballasts and compact lamps and inverter.

## Features

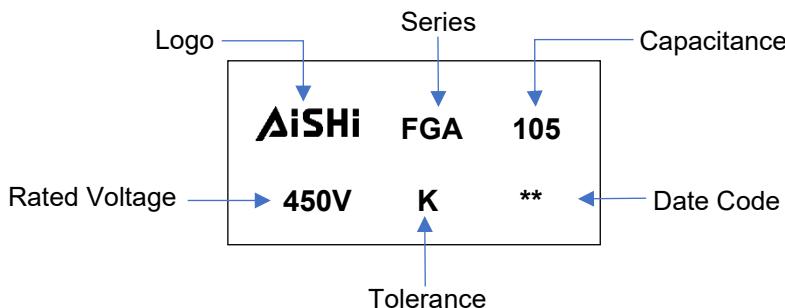
- High ripple current
- Self-healing property
- Low losses
- High contact reliability



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 450Vdc ~ 630Vdc  |
| Capacitance Range           | 0.01uF ~ 3.3uF   |
| Capacitance Tolerance       | ±5% or ±10% at +25°C   |
| Operating Temperature Range | -40°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)  |
| Climatic Category           | 40/105/56 IEC 60068-1  |
| Dissipation Factor          | 0.0010 (25°C, 1KHz)  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 30 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 10 000 MΩ*uF |

## Marking



## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Part Number System

| F              | GA                          | 2W                         | K                   | 105   | E43                      | 2EL                          | 5                               |
|----------------|-----------------------------|----------------------------|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series                      | Voltage (VDC)              | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | DC Film, Metallized PP Film | 450=2W<br>550=2J<br>630=2L | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

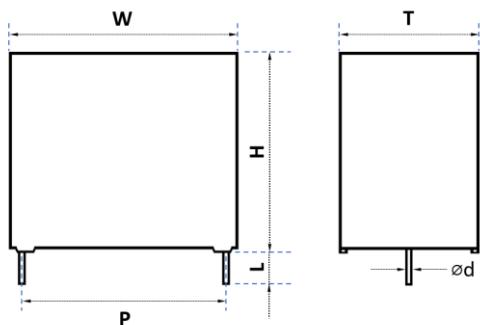
## Terminal Code

| Digit One (Lead/Terminal Type) |   | Digit Two (Lead Space) |   | Digit Three (Lead Ipsilateral) |   |
|--------------------------------|---|------------------------|---|--------------------------------|---|
| 2 leads for long               | L | 10.0mm                 | C | N/A                            | L |
| 2 leads for straight cut       | 2 | 12.5mm                 | D |                                |   |
| 2 leads for forming cut        | E | 15.0mm                 | E |                                |   |
| 2 leads for taping forming     | T | 22.5mm                 | F |                                |   |
| 2 leads for taping straight    | V |                        |   |                                |   |
| 2 leads for 90°C bent cut      | Y |                        |   |                                |   |
|                                |   |                        |   |                                |   |
|                                |   |                        |   |                                |   |
|                                |   |                        |   |                                |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 20mm min    | L |
| 35mm min    | B |
| 3.2mm       | 1 |
| 3.5mm       | 2 |
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |            |      |            |      |            | Pitch |            | Lead Wire |            |
|-----------|-----------|------------|------|------------|------|------------|-------|------------|-----------|------------|
|           | W         | Toleranc e | H    | Toleranc e | T    | Toleranc e | P     | Toleranc e | Ød        | Toleranc e |
| C13       | 13.0      | 0.5        | 11.0 | 0.5        | 5.0  | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| C16       | 13.0      | 0.5        | 12.0 | 0.5        | 6.0  | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| C24       | 13.0      | 0.5        | 13.0 | 0.5        | 7.0  | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| C26       | 13.0      | 0.5        | 14.0 | 0.5        | 8.0  | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| C27       | 13.0      | 0.5        | 16.0 | 0.5        | 8.0  | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| C31       | 13.0      | 0.5        | 18.0 | 0.5        | 9.0  | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| C33       | 13.0      | 0.5        | 19.0 | 0.5        | 10.0 | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| E14       | 18.0      | 0.5        | 11.0 | 0.5        | 5.0  | 0.5        | 15.0  | 0.5        | 0.6       | 0.05       |
| E17       | 18.0      | 0.5        | 12.0 | 0.5        | 6.0  | 0.5        | 15.0  | 0.5        | 0.6       | 0.05       |
| E19       | 18.0      | 0.5        | 17.5 | 0.5        | 6.0  | 0.5        | 15.0  | 0.5        | 0.6       | 0.05       |
| E21       | 18.0      | 0.5        | 13.0 | 0.5        | 7.0  | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E26       | 18.0      | 0.5        | 18.0 | 0.5        | 7.0  | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E29       | 18.0      | 0.5        | 13.5 | 0.5        | 7.5  | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E33       | 18.0      | 0.5        | 16.0 | 0.5        | 8.0  | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E34       | 18.0      | 0.5        | 14.5 | 0.5        | 8.5  | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E36       | 18.0      | 0.5        | 12.5 | 0.5        | 9.0  | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E39       | 18.0      | 0.5        | 18.0 | 0.5        | 9.0  | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E43       | 18.0      | 0.5        | 16.0 | 0.5        | 10.0 | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E45       | 18.0      | 0.5        | 18.0 | 0.5        | 10.0 | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E47       | 18.0      | 0.5        | 19.0 | 0.5        | 11.0 | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E57       | 18.0      | 0.5        | 12.0 | 0.5        | 13.0 | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| F24       | 26.0      | 0.5        | 19.0 | 0.5        | 10.0 | 0.5        | 22.5  | 0.5        | 0.8       | 0.05       |
| F26       | 26.0      | 0.5        | 20.0 | 0.5        | 11.0 | 0.5        | 22.5  | 0.5        | 0.8       | 0.05       |
| F29       | 26.0      | 0.5        | 23.0 | 0.5        | 13.0 | 0.5        | 22.5  | 0.5        | 0.8       | 0.05       |

### Rating and Part Number

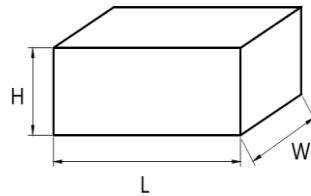
| Vdc | Vac | Cap Value | Dimensions |         |         |         | Peak Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|---------|---------|---------|--------------|-------|-----------|------------------|
|     |     |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |       |           |                  |
| 450 | 220 | 0.1       | 13.0       | 11.0    | 5.0     | 10.0    | 25           | 250   | 0.6       | FGA2WK104C132CL5 |
| 450 | 220 | 0.15      | 13.0       | 11.0    | 5.0     | 10.0    | 37.5         | 250   | 0.6       | FGA2WK154C132CL5 |
| 450 | 220 | 0.22      | 13.0       | 11.0    | 5.0     | 10.0    | 55           | 250   | 0.6       | FGA2WK224C132CL5 |
| 450 | 220 | 0.33      | 13.0       | 12.0    | 6.0     | 10.0    | 82.5         | 250   | 0.6       | FGA2WK334C162CL5 |
| 450 | 220 | 0.39      | 13.0       | 13.0    | 7.0     | 10.0    | 97.5         | 250   | 0.6       | FGA2WK394C242CL5 |
| 450 | 220 | 0.47      | 13.0       | 12.0    | 6.0     | 10.0    | 94           | 200   | 0.6       | FGA2WK474C162CL5 |
| 450 | 220 | 0.47      | 13.0       | 13.0    | 7.0     | 10.0    | 117.5        | 250   | 0.6       | FGA2WK474C242CL5 |
| 450 | 220 | 0.56      | 13.0       | 14.0    | 8.0     | 10.0    | 140          | 250   | 0.6       | FGA2WK564C262CL5 |
| 450 | 220 | 0.68      | 13.0       | 16.0    | 8.0     | 10.0    | 170          | 250   | 0.6       | FGA2WK684C272CL5 |
| 450 | 220 | 0.82      | 13.0       | 19.0    | 10.0    | 10.0    | 205          | 250   | 0.6       | FGA2WK824C332CL5 |
| 450 | 220 | 1         | 13.0       | 18.0    | 9.0     | 10.0    | 200          | 200   | 0.6       | FGA2WK105C312CL5 |
| 450 | 220 | 1         | 13.0       | 19.0    | 10.0    | 10.0    | 250          | 250   | 0.6       | FGA2WK105C332CL5 |
| 450 | 220 | 0.1       | 18.0       | 11.0    | 5.0     | 15.0    | 16           | 160   | 0.6       | FGA2WK104E142EL5 |
| 450 | 220 | 0.15      | 18.0       | 11.0    | 5.0     | 15.0    | 24           | 160   | 0.6       | FGA2WK154E142EL5 |
| 450 | 220 | 0.22      | 18.0       | 11.0    | 5.0     | 15.0    | 26.4         | 120   | 0.6       | FGA2WK224E142EL5 |
| 450 | 220 | 0.22      | 18.0       | 12.0    | 6.0     | 15.0    | 35.2         | 160   | 0.6       | FGA2WK224E172EL5 |
| 450 | 220 | 0.33      | 18.0       | 11.0    | 5.0     | 15.0    | 39.6         | 120   | 0.6       | FGA2WK334E142EL5 |
| 450 | 220 | 0.47      | 18.0       | 12.0    | 6.0     | 15.0    | 56.4         | 120   | 0.6       | FGA2WK474E172EL5 |
| 450 | 220 | 0.47      | 18.0       | 13.5    | 7.5     | 15.0    | 75.2         | 160   | 0.8       | FGA2WK474E292EL5 |
| 450 | 220 | 0.47      | 18.0       | 12.5    | 9.0     | 15.0    | 75.2         | 160   | 0.8       | FGA2WK474E362EL5 |
| 450 | 220 | 0.68      | 18.0       | 12.0    | 6.0     | 15.0    | 81.6         | 120   | 0.6       | FGA2WK684E172EL5 |
| 450 | 220 | 0.68      | 18.0       | 17.5    | 6.0     | 15.0    | 108.8        | 160   | 0.6       | FGA2WK684E192EL5 |
| 450 | 220 | 0.68      | 18.0       | 14.5    | 8.5     | 15.0    | 108.8        | 160   | 0.8       | FGA2WK684E342EL5 |
| 450 | 220 | 0.82      | 18.0       | 14.5    | 8.5     | 15.0    | 131.2        | 160   | 0.8       | FGA2WK824E342EL5 |
| 450 | 220 | 1         | 18.0       | 13.0    | 7.0     | 15.0    | 120          | 120   | 0.8       | FGA2WK105E212EL5 |
| 450 | 220 | 1         | 18.0       | 14.5    | 8.5     | 15.0    | 160          | 160   | 0.8       | FGA2WK105E342EL5 |
| 450 | 220 | 1.5       | 18.0       | 16.0    | 8.0     | 15.0    | 180          | 120   | 0.8       | FGA2WK155E332EL5 |
| 450 | 220 | 1.5       | 18.0       | 18.0    | 9.0     | 15.0    | 240          | 160   | 0.8       | FGA2WK155E392EL5 |
| 450 | 220 | 2         | 18.0       | 18.0    | 9.0     | 15.0    | 240          | 120   | 0.8       | FGA2WK205E392EL5 |
| 450 | 220 | 2.2       | 18.0       | 18.0    | 10.0    | 15.0    | 264          | 120   | 0.8       | FGA2WK225E452EL5 |
| 450 | 220 | 2.2       | 26.0       | 19.0    | 10.0    | 22.5    | 220          | 100   | 0.6       | FGA2WK225F242FL5 |
| 450 | 220 | 3.3       | 26.0       | 23.0    | 13.0    | 22.5    | 330          | 100   | 0.8       | FGA2WK335F292FL5 |
| 550 | 250 | 0.1       | 13.0       | 11.0    | 5.0     | 10.0    | 30           | 300   | 0.6       | FGA2JK104C132CL5 |
| 550 | 250 | 0.15      | 13.0       | 12.0    | 6.0     | 10.0    | 45           | 300   | 0.6       | FGA2JK154C162CL5 |
| 550 | 250 | 0.22      | 13.0       | 13.0    | 7.0     | 10.0    | 66           | 300   | 0.6       | FGA2JK224C242CL5 |
| 550 | 250 | 0.33      | 13.0       | 14.0    | 8.0     | 10.0    | 99           | 300   | 0.6       | FGA2JK334C262CL5 |
| 550 | 250 | 0.47      | 13.0       | 16.0    | 8.0     | 10.0    | 141          | 300   | 0.6       | FGA2JK474C272CL5 |
| 550 | 250 | 0.1       | 18.0       | 11.0    | 5.0     | 15.0    | 20           | 200   | 0.6       | FGA2JK104E142EL5 |
| 550 | 250 | 0.15      | 18.0       | 11.0    | 5.0     | 15.0    | 30           | 200   | 0.6       | FGA2JK154E142EL5 |
| 550 | 250 | 0.22      | 18.0       | 12.0    | 6.0     | 15.0    | 44           | 200   | 0.6       | FGA2JK224E172EL5 |
| 550 | 250 | 0.33      | 18.0       | 17.5    | 6.0     | 15.0    | 66           | 200   | 0.6       | FGA2JK334E192EL5 |
| 550 | 250 | 0.33      | 18.0       | 13.5    | 7.5     | 15.0    | 66           | 200   | 0.8       | FGA2JK334E292EL5 |
| 550 | 250 | 0.33      | 18.0       | 12.5    | 9.0     | 15.0    | 66           | 200   | 0.8       | FGA2JK334E362EL5 |
| 550 | 250 | 0.47      | 18.0       | 14.5    | 8.5     | 15.0    | 94           | 200   | 0.8       | FGA2JK474E342EL5 |
| 550 | 250 | 0.47      | 18.0       | 18.0    | 7.0     | 15.0    | 94           | 200   | 0.8       | FGA2JK474E262EL5 |
| 550 | 250 | 0.47      | 18.0       | 12.0    | 13.0    | 15.0    | 94           | 200   | 0.8       | FGA2JK474E572EL5 |
| 550 | 250 | 0.68      | 18.0       | 16.0    | 10.0    | 15.0    | 136          | 200   | 0.8       | FGA2JK684E432EL5 |
| 550 | 250 | 0.82      | 18.0       | 19.0    | 11.0    | 15.0    | 164          | 200   | 0.8       | FGA2JK824E472EL5 |

## Rating and Part Number

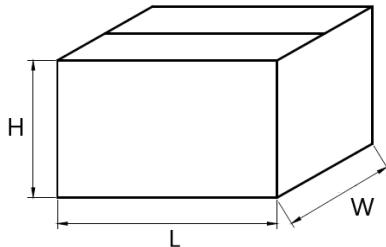
| Vdc | Vac | Cap Value<br>μF | Dimensions |         |         |         | Peak Current<br>A | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-----|-----------------|------------|---------|---------|---------|-------------------|---------------|-----------------|------------------|
|     |     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm |                   |               |                 |                  |
| 550 | 250 | 1               | 18.0       | 19.0    | 11.0    | 15.0    | 200               | 200           | 0.8             | FGA2JK105E472EL5 |
| 550 | 250 | 1.5             | 26.0       | 20.0    | 11.0    | 22.5    | 180               | 120           | 0.8             | FGA2JK155F262FL5 |
| 550 | 250 | 2.2             | 26.0       | 23.0    | 13.0    | 22.5    | 264               | 120           | 0.8             | FGA2JK225F292FL5 |
| 630 | 275 | 0.01            | 13.0       | 11.0    | 5.0     | 10.0    | 4                 | 400           | 0.6             | FGA2LK103C132CL5 |
| 630 | 275 | 0.015           | 13.0       | 11.0    | 5.0     | 10.0    | 6                 | 400           | 0.6             | FGA2LK153C132CL5 |
| 630 | 275 | 0.022           | 13.0       | 11.0    | 5.0     | 10.0    | 8.8               | 400           | 0.6             | FGA2LK223C132CL5 |
| 630 | 275 | 0.033           | 13.0       | 11.0    | 5.0     | 10.0    | 13.2              | 400           | 0.6             | FGA2LK333C132CL5 |
| 630 | 275 | 0.047           | 13.0       | 11.0    | 5.0     | 10.0    | 18.8              | 400           | 0.6             | FGA2LK473C132CL5 |
| 630 | 275 | 0.068           | 13.0       | 12.0    | 6.0     | 10.0    | 27.2              | 400           | 0.6             | FGA2LK683C162CL5 |
| 630 | 275 | 0.082           | 13.0       | 12.0    | 6.0     | 10.0    | 32.8              | 400           | 0.6             | FGA2LK823C162CL5 |
| 630 | 275 | 0.1             | 13.0       | 12.0    | 6.0     | 10.0    | 40                | 400           | 0.6             | FGA2LK104C162CL5 |
| 630 | 275 | 0.047           | 18.0       | 11.0    | 5.0     | 15.0    | 11.75             | 250           | 0.6             | FGA2LK473E142EL5 |
| 630 | 275 | 0.056           | 18.0       | 11.0    | 5.0     | 15.0    | 14                | 250           | 0.6             | FGA2LK563E142EL5 |
| 630 | 275 | 0.068           | 18.0       | 11.0    | 5.0     | 15.0    | 17                | 250           | 0.6             | FGA2LK683E142EL5 |
| 630 | 275 | 0.082           | 18.0       | 11.0    | 5.0     | 15.0    | 20.5              | 250           | 0.6             | FGA2LK823E142EL5 |
| 630 | 275 | 0.1             | 18.0       | 11.0    | 5.0     | 15.0    | 25                | 250           | 0.6             | FGA2LK104E142EL5 |
| 630 | 275 | 0.15            | 18.0       | 12.0    | 6.0     | 15.0    | 37.5              | 250           | 0.6             | FGA2LK154E172EL5 |
| 630 | 275 | 0.22            | 18.0       | 17.5    | 6.0     | 15.0    | 55                | 250           | 0.6             | FGA2LK224E192EL5 |
| 630 | 275 | 0.22            | 18.0       | 13.5    | 7.5     | 15.0    | 55                | 250           | 0.8             | FGA2LK224E292EL5 |
| 630 | 275 | 0.22            | 18.0       | 12.5    | 9.0     | 15.0    | 55                | 250           | 0.8             | FGA2LK224E362EL5 |
| 630 | 275 | 0.33            | 18.0       | 18.0    | 7.0     | 15.0    | 82.5              | 250           | 0.8             | FGA2LK334E262EL5 |
| 630 | 275 | 0.33            | 18.0       | 14.5    | 8.5     | 15.0    | 82.5              | 250           | 0.8             | FGA2LK334E342EL5 |
| 630 | 275 | 0.33            | 18.0       | 12.5    | 9.0     | 15.0    | 82.5              | 250           | 0.8             | FGA2LK334E362EL5 |
| 630 | 275 | 0.47            | 18.0       | 18.0    | 7.0     | 15.0    | 117.5             | 250           | 0.8             | FGA2LK474E262EL5 |
| 630 | 275 | 0.47            | 18.0       | 16.0    | 10.0    | 15.0    | 117.5             | 250           | 0.8             | FGA2LK474E432EL5 |
| 630 | 275 | 0.47            | 18.0       | 12.0    | 13.0    | 15.0    | 117.5             | 250           | 0.8             | FGA2LK474E572EL5 |
| 630 | 275 | 0.68            | 18.0       | 19.0    | 11.0    | 15.0    | 170               | 250           | 0.8             | FGA2LK684E472EL5 |
| 630 | 275 | 0.82            | 26.0       | 19.0    | 10.0    | 22.5    | 131.2             | 160           | 0.8             | FGA2LK824F242FL5 |
| 630 | 275 | 1               | 26.0       | 20.0    | 11.0    | 22.5    | 160               | 160           | 0.8             | FGA2LK105F262FL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 10    | C13       | 13        | 11   | 5   | 1,200              | 1,488       | 680       |
|       | C16       | 13        | 12   | 6   | 1,200              | 1,224       | 560       |
|       | C24       | 13        | 13   | 7   | 1,200              | 1,056       | 480       |
|       | C26       | 13        | 14   | 8   | 1,200              | 912         | 410       |
|       | C27       | 13        | 16   | 8   | 1,200              | 912         | 410       |
|       | C31       | 13        | 18   | 9   | 1,200              | 816         | 370       |
|       | C33       | 13        | 19   | 10  | 1,200              | 744         | 340       |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E19       | 18        | 17.5 | 6   | 800                | 867         | 560       |
|       | E21       | 18        | 13   | 7   | 800                | 748         | 480       |
|       | E26       | 18        | 18   | 7   | 800                | 748         | 480       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E33       | 18        | 16   | 8   | 600                | 646         | 410       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E36       | 18        | 12.5 | 9   | 600                | 578         | 370       |
|       | E39       | 18        | 18   | 9   | 600                | 578         | 370       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E45       | 18        | 18   | 10  | 600                | 527         | 330       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
|       | E57       | 18        | 12   | 13  | 600                | 391         | 250       |
| 22.5  | F24       | 26        | 19   | 10  |                    | 372         | 210       |
|       | F26       | 26        | 20   | 11  |                    | 336         | 190       |
|       | F29       | 26        | 23   | 13  |                    | 276         | 160       |

## Overview

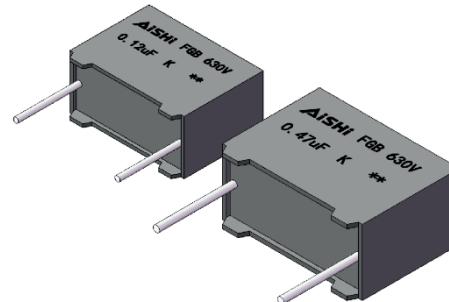
The FGB series is constructed of metallized polypropylene film encapsulated in plastic cases, sealed with epoxy resin.

## Applications

Widely used in high current and high frequency applications, DC/AC and pulse circuits and ballast & compacts lamps

## Features

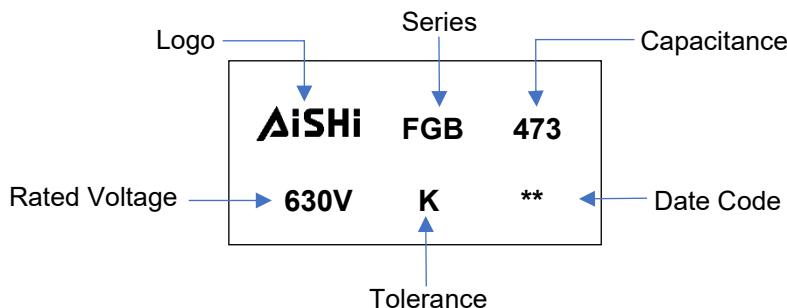
- High ripple current
- Self-healing property
- Low losses
- High contact reliability
- Suitable for high frequency applications



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polypropylene Film  |
| Voltage Range               | 100Vdc ~ 630Vdc  |
| Capacitance Range           | 0.01uF ~ 82uF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C   |
| Operating Temperature Range | -40°C ~ +105°C<br>(85°C ~ 105°C, decreasing factor 1.25% per °C for Rated Voltage)   |
| Climatic Category           | 40/105/56 IEC 60068-1  |
| Dissipation Factor          | 0.0010 (25°C, 1KHz)  |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 30 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 10 000 MΩ*uF |

## Marking



## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Part Number System

| F              | GB                          | 2G                                   | K                   | 105   | F26                      | 2FL                          | 5                               |
|----------------|-----------------------------|--------------------------------------|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series                      | Voltage (VDC)                        | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | DC Film, Metallized PP Film | 100=1K<br>250=2E<br>400=2G<br>630=2L | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

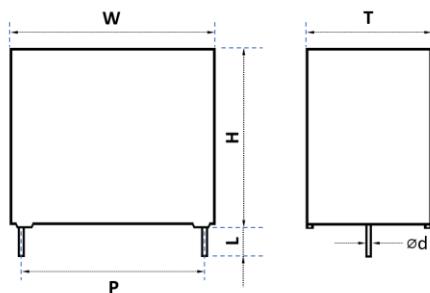
## Terminal Code

| Digit One (Lead/Terminal Type) |   | Digit Two (Lead Space) |   | Digit Three (Lead Ipsilateral) |   |
|--------------------------------|---|------------------------|---|--------------------------------|---|
| 2 leads for long               | L | 10.0mm                 | C | N/A                            | L |
| 2 leads for straight cut       | 2 | 12.5mm                 | D |                                |   |
| 2 leads for forming cut        | E | 15.0mm                 | E |                                |   |
| 2 leads for taping forming     | T | 22.5mm                 | F |                                |   |
| 2 leads for taping straight    | V | 27.5mm                 | G |                                |   |
|                                |   | 37.5mm                 | K |                                |   |
|                                |   |                        |   |                                |   |
|                                |   |                        |   |                                |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 20mm min    | L |
| 35mm min    | B |
| 3.2mm       | 1 |
| 3.5mm       | 2 |
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |      |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|------|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T    | Tolerance | P     | Tolerance | Ød        | Tolerance |
| C13       | 13.0      | 0.5       | 11.0 | 0.5       | 5.0  | 0.5       | 10.0  | 0.5       | 0.6       | 0.05      |
| C16       | 13.0      | 0.5       | 12.0 | 0.5       | 6.0  | 0.5       | 10.0  | 0.5       | 0.6       | 0.05      |
| E14       | 18.0      | 0.5       | 11.0 | 0.5       | 5.0  | 0.5       | 15.0  | 0.5       | 0.6       | 0.05      |
| E17       | 18.0      | 0.5       | 12.0 | 0.5       | 6.0  | 0.5       | 15.0  | 0.5       | 0.6       | 0.05      |
| E29       | 18.0      | 0.5       | 13.5 | 0.5       | 7.5  | 0.5       | 15.0  | 0.5       | 0.8       | 0.05      |
| E34       | 18.0      | 0.5       | 14.5 | 0.5       | 8.5  | 0.5       | 15.0  | 0.5       | 0.8       | 0.05      |
| E43       | 18.0      | 0.5       | 16.0 | 0.5       | 10.0 | 0.5       | 15.0  | 0.5       | 0.8       | 0.05      |
| E47       | 18.0      | 0.5       | 19.0 | 0.5       | 11.0 | 0.5       | 15.0  | 0.5       | 0.8       | 0.05      |
| F20       | 26.0      | 0.5       | 17.0 | 0.5       | 8.5  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F24       | 26.0      | 0.5       | 19.0 | 0.5       | 10.0 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F26       | 26.0      | 0.5       | 20.0 | 0.5       | 11.0 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F29       | 26.0      | 0.5       | 23.0 | 0.5       | 13.0 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32.0      | 0.8       | 20.0 | 0.8       | 11.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G21       | 32.0      | 0.8       | 22.0 | 0.8       | 13.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G22       | 32.0      | 0.8       | 24.5 | 0.8       | 13.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32.0      | 0.8       | 28.0 | 0.8       | 14.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32.0      | 0.8       | 33.0 | 0.8       | 18.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G37       | 32.0      | 0.8       | 31.0 | 0.8       | 21.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32.0      | 0.8       | 37.0 | 0.8       | 22.0 | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| K21       | 42.0      | 1.0       | 32.0 | 1.0       | 19.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K24       | 42.0      | 1.0       | 40.0 | 1.0       | 20.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K32       | 42.0      | 1.0       | 44.0 | 1.0       | 24.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |
| K42       | 42.0      | 1.0       | 45.0 | 1.0       | 30.0 | 1.0       | 37.5  | 0.5       | 1.0       | 0.05      |

### Rating and Part Number

| Vdc | Vac | Cap Value | Dimensions |         |         |         | Peak Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|---------|---------|---------|--------------|-------|-----------|------------------|
|     |     |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |       |           |                  |
| 100 | 50  | 0.1       | 13.0       | 11.0    | 5.0     | 10.0    | 18.0         | 180   | 0.6       | FGB1KK104C132CL5 |
| 100 | 50  | 0.12      | 13.0       | 11.0    | 5.0     | 10.0    | 21.6         | 180   | 0.6       | FGB1KK124C132CL5 |
| 100 | 50  | 0.15      | 13.0       | 11.0    | 5.0     | 10.0    | 27.0         | 180   | 0.6       | FGB1KK154C132CL5 |
| 100 | 50  | 0.18      | 13.0       | 12.0    | 6.0     | 10.0    | 32.4         | 180   | 0.6       | FGB1KK184C162CL5 |
| 100 | 50  | 0.22      | 13.0       | 12.0    | 6.0     | 10.0    | 39.6         | 180   | 0.6       | FGB1KK224C162CL5 |
| 100 | 50  | 0.27      | 18.0       | 12.0    | 6.0     | 15.0    | 27.0         | 100   | 0.6       | FGB1KK274E172EL5 |
| 100 | 50  | 0.33      | 18.0       | 12.0    | 6.0     | 15.0    | 33.0         | 100   | 0.6       | FGB1KK334E172EL5 |
| 100 | 50  | 0.39      | 18.0       | 13.5    | 7.5     | 15.0    | 39.0         | 100   | 0.8       | FGB1KK394E292EL5 |
| 100 | 50  | 0.47      | 18.0       | 13.5    | 7.5     | 15.0    | 47.0         | 100   | 0.8       | FGB1KK474E292EL5 |
| 100 | 50  | 0.56      | 18.0       | 14.5    | 8.5     | 15.0    | 56.0         | 100   | 0.8       | FGB1KK564E342EL5 |
| 100 | 50  | 0.68      | 18.0       | 14.5    | 8.5     | 15.0    | 68.0         | 100   | 0.8       | FGB1KK684E342EL5 |
| 100 | 50  | 0.82      | 18.0       | 16.0    | 10.0    | 15.0    | 82.0         | 100   | 0.8       | FGB1KK824E432EL5 |
| 100 | 50  | 1.0       | 18.0       | 16.0    | 10.0    | 15.0    | 100.0        | 100   | 0.8       | FGB1KK105E432EL5 |
| 100 | 50  | 1.2       | 26.0       | 17.0    | 8.5     | 22.5    | 72.0         | 60    | 0.8       | FGB1KK125F202FL5 |
| 100 | 50  | 1.5       | 26.0       | 19.0    | 10.0    | 22.5    | 90.0         | 60    | 0.8       | FGB1KK155F242FL5 |
| 100 | 50  | 1.8       | 26.0       | 19.0    | 10.0    | 22.5    | 108.0        | 60    | 0.8       | FGB1KK185F242FL5 |
| 100 | 50  | 2.2       | 32.0       | 20.0    | 11.0    | 27.5    | 110.0        | 50    | 0.8       | FGB1KK225G182GL5 |
| 100 | 50  | 2.7       | 32.0       | 20.0    | 11.0    | 27.5    | 135.0        | 50    | 0.8       | FGB1KK275G182GL5 |
| 100 | 50  | 3.3       | 32.0       | 22.0    | 13.0    | 27.5    | 165.0        | 50    | 0.8       | FGB1KK335G212GL5 |
| 100 | 50  | 3.9       | 32.0       | 22.0    | 13.0    | 27.5    | 195.0        | 50    | 0.8       | FGB1KK395G212GL5 |
| 100 | 50  | 4.7       | 32.0       | 24.5    | 13.0    | 27.5    | 235.0        | 50    | 0.8       | FGB1KK475G222GL5 |
| 100 | 50  | 5.6       | 32.0       | 28.0    | 14.0    | 27.5    | 280.0        | 50    | 0.8       | FGB1KK565G262GL5 |
| 100 | 50  | 68        | 32.0       | 33.0    | 18.0    | 27.5    | 3400.0       | 50    | 0.8       | FGB1KK685G342GL5 |
| 100 | 50  | 82        | 32.0       | 33.0    | 18.0    | 27.5    | 4100.0       | 50    | 0.8       | FGB1KK825G342GL5 |
| 100 | 50  | 10        | 32.0       | 31.0    | 21.0    | 27.5    | 500.0        | 50    | 0.8       | FGB1KK106G372GL5 |
| 100 | 50  | 10        | 32.0       | 37.0    | 22.0    | 27.5    | 500.0        | 50    | 0.8       | FGB1KK106G402GL5 |
| 100 | 50  | 12        | 32.0       | 37.0    | 22.0    | 27.5    | 600.0        | 50    | 0.8       | FGB1KK126G402GL5 |
| 100 | 50  | 12        | 42.0       | 32.0    | 19.0    | 37.5    | 420.0        | 35    | 1.0       | FGB1KK126K212KL5 |
| 100 | 50  | 15        | 42.0       | 40.0    | 20.0    | 37.5    | 525.0        | 35    | 1.0       | FGB1KK156K242KL5 |
| 100 | 50  | 18        | 42.0       | 40.0    | 20.0    | 37.5    | 630.0        | 35    | 1.0       | FGB1KK186K242KL5 |
| 100 | 50  | 22        | 42.0       | 44.0    | 24.0    | 37.5    | 770.0        | 35    | 1.0       | FGB1KK226K322KL5 |
| 100 | 50  | 27        | 42.0       | 45.0    | 30.0    | 37.5    | 945.0        | 35    | 1.0       | FGB1KK276K422KL5 |
| 100 | 50  | 33        | 42.0       | 45.0    | 30.0    | 37.5    | 1155.0       | 35    | 1.0       | FGB1KK336K422KL5 |
| 250 | 160 | 0.033     | 13.0       | 11.0    | 5.0     | 10.0    | 18.2         | 550   | 0.6       | FGB2EK333C132CL5 |
| 250 | 160 | 0.039     | 13.0       | 11.0    | 5.0     | 10.0    | 21.5         | 550   | 0.6       | FGB2EK393C132CL5 |
| 250 | 160 | 0.047     | 13.0       | 11.0    | 5.0     | 10.0    | 25.9         | 550   | 0.6       | FGB2EK473C132CL5 |
| 250 | 160 | 0.056     | 13.0       | 11.0    | 5.0     | 10.0    | 30.8         | 550   | 0.6       | FGB2EK563C132CL5 |
| 250 | 160 | 0.068     | 13.0       | 11.0    | 5.0     | 10.0    | 37.4         | 550   | 0.6       | FGB2EK683C132CL5 |
| 250 | 160 | 0.082     | 13.0       | 11.0    | 5.0     | 10.0    | 45.1         | 550   | 0.6       | FGB2EK823C132CL5 |
| 250 | 160 | 0.1       | 13.0       | 11.0    | 5.0     | 10.0    | 55.0         | 550   | 0.6       | FGB2EK104C132CL5 |
| 250 | 160 | 0.12      | 13.0       | 12.0    | 6.0     | 10.0    | 66.0         | 550   | 0.6       | FGB2EK124C162CL5 |
| 250 | 160 | 0.15      | 13.0       | 12.0    | 6.0     | 10.0    | 82.5         | 550   | 0.6       | FGB2EK154C162CL5 |
| 250 | 160 | 0.18      | 18.0       | 11.0    | 5.0     | 15.0    | 54.0         | 300   | 0.6       | FGB2EK184E142EL5 |
| 250 | 160 | 0.22      | 18.0       | 11.0    | 5.0     | 15.0    | 66.0         | 300   | 0.6       | FGB2EK224E142EL5 |
| 250 | 160 | 0.27      | 18.0       | 12.0    | 6.0     | 15.0    | 81.0         | 300   | 0.6       | FGB2EK274E172EL5 |
| 250 | 160 | 0.33      | 18.0       | 12.0    | 6.0     | 15.0    | 99.0         | 300   | 0.6       | FGB2EK334E172EL5 |
| 250 | 160 | 0.39      | 18.0       | 13.5    | 7.5     | 15.0    | 117.0        | 300   | 0.8       | FGB2EK394E292EL5 |
| 250 | 160 | 0.47      | 18.0       | 13.5    | 7.5     | 15.0    | 141.0        | 300   | 0.8       | FGB2EK474E292EL5 |

### Rating and Part Number

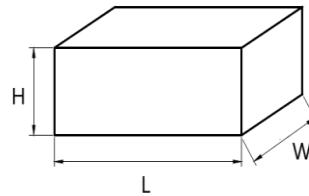
| Vdc | Vac | Cap Value | Dimensions |         |         |         | Peak Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|---------|---------|---------|--------------|-------|-----------|------------------|
|     |     |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |       |           |                  |
| 250 | 160 | 0.56      | 18.0       | 13.5    | 7.5     | 15.0    | 168.0        | 300   | 0.8       | FGB2EK564E292EL5 |
| 250 | 160 | 0.68      | 18.0       | 14.5    | 8.5     | 15.0    | 204.0        | 300   | 0.8       | FGB2EK684E342EL5 |
| 250 | 160 | 0.82      | 18.0       | 16.0    | 10.0    | 15.0    | 246.0        | 300   | 0.8       | FGB2EK824E432EL5 |
| 250 | 160 | 1.2       | 18.0       | 16.0    | 10.0    | 15.0    | 360.0        | 300   | 0.8       | FGB2EK105E432EL5 |
| 250 | 160 | 1.2       | 18.0       | 19.0    | 11.0    | 15.0    | 360.0        | 300   | 0.8       | FGB2EK125E472EL5 |
| 250 | 160 | 1.2       | 26.0       | 17.0    | 8.5     | 22.5    | 150.0        | 125   | 0.8       | FGB2EK125F202FL5 |
| 250 | 160 | 1.5       | 26.0       | 19.0    | 10.0    | 22.5    | 187.5        | 125   | 0.8       | FGB2EK155F242FL5 |
| 250 | 160 | 1.8       | 26.0       | 19.0    | 10.0    | 22.5    | 225.0        | 125   | 0.8       | FGB2EK185F242FL5 |
| 250 | 160 | 2.2       | 26.0       | 20.0    | 11.0    | 22.5    | 275.0        | 125   | 0.8       | FGB2EK225F262FL5 |
| 250 | 160 | 2.7       | 26.0       | 23.0    | 13.0    | 22.5    | 337.5        | 125   | 0.8       | FGB2EK275F292FL5 |
| 250 | 160 | 3.3       | 26.0       | 23.0    | 13.0    | 22.5    | 412.5        | 125   | 0.8       | FGB2EK335F292FL5 |
| 250 | 160 | 3.9       | 32.0       | 22.0    | 13.0    | 27.5    | 390.0        | 100   | 0.8       | FGB2EK395G212GL5 |
| 250 | 160 | 4.7       | 32.0       | 24.5    | 13.0    | 27.5    | 470.0        | 100   | 0.8       | FGB2EK475G222GL5 |
| 250 | 160 | 5.6       | 32.0       | 28.0    | 14.0    | 27.5    | 560.0        | 100   | 0.8       | FGB2EK565G262GL5 |
| 250 | 160 | 6.8       | 32.0       | 33.0    | 18.0    | 27.5    | 680.0        | 100   | 0.8       | FGB2EK685G342GL5 |
| 250 | 160 | 8.2       | 32.0       | 33.0    | 18.0    | 27.5    | 820.0        | 100   | 0.8       | FGB2EK825G342GL5 |
| 250 | 160 | 10        | 32.0       | 37.0    | 22.0    | 27.5    | 1000.0       | 100   | 0.8       | FGB2EK106G402GL5 |
| 250 | 160 | 12        | 42.0       | 32.0    | 19.0    | 37.5    | 480.0        | 40    | 1.0       | FGB2EK126K212KL5 |
| 250 | 160 | 15        | 42.0       | 40.0    | 20.0    | 37.5    | 600.0        | 40    | 1.0       | FGB2EK156K242KL5 |
| 250 | 160 | 22        | 42.0       | 44.0    | 24.0    | 37.5    | 880.0        | 40    | 1.0       | FGB2EK226K322KL5 |
| 250 | 160 | 30        | 42.0       | 45.0    | 30.0    | 37.5    | 1200.0       | 40    | 1.0       | FGB2EK306K422KL5 |
| 400 | 220 | 0.015     | 13.0       | 11.0    | 5.0     | 10.0    | 18.0         | 1200  | 0.6       | FGB2GK153C132CL5 |
| 400 | 220 | 0.018     | 13.0       | 11.0    | 5.0     | 10.0    | 21.6         | 1200  | 0.6       | FGB2GK183C132CL5 |
| 400 | 220 | 0.022     | 13.0       | 11.0    | 5.0     | 10.0    | 26.4         | 1200  | 0.6       | FGB2GK223C132CL5 |
| 400 | 220 | 0.027     | 13.0       | 11.0    | 5.0     | 10.0    | 32.4         | 1200  | 0.6       | FGB2GK273C132CL5 |
| 400 | 220 | 0.033     | 13.0       | 11.0    | 5.0     | 10.0    | 39.6         | 1200  | 0.6       | FGB2GK333C132CL5 |
| 400 | 220 | 0.039     | 13.0       | 11.0    | 5.0     | 10.0    | 46.8         | 1200  | 0.6       | FGB2GK393C132CL5 |
| 400 | 220 | 0.047     | 13.0       | 11.0    | 5.0     | 10.0    | 56.4         | 1200  | 0.6       | FGB2GK473C132CL5 |
| 400 | 220 | 0.056     | 13.0       | 12.0    | 6.0     | 10.0    | 67.2         | 1200  | 0.6       | FGB2GK563C162CL5 |
| 400 | 220 | 0.068     | 13.0       | 12.0    | 6.0     | 10.0    | 81.6         | 1200  | 0.6       | FGB2GK683C162CL5 |
| 400 | 220 | 0.082     | 18.0       | 11.0    | 5.0     | 15.0    | 65.6         | 800   | 0.6       | FGB2GK823E142EL5 |
| 400 | 220 | 0.1       | 18.0       | 11.0    | 5.0     | 15.0    | 80.0         | 800   | 0.6       | FGB2GK104E142EL5 |
| 400 | 220 | 0.12      | 18.0       | 12.0    | 6.0     | 15.0    | 96.0         | 800   | 0.6       | FGB2GK124E172EL5 |
| 400 | 220 | 0.15      | 18.0       | 12.0    | 6.0     | 15.0    | 120.0        | 800   | 0.6       | FGB2GK154E172EL5 |
| 400 | 220 | 0.18      | 18.0       | 13.5    | 7.5     | 15.0    | 144.0        | 800   | 0.8       | FGB2GK184E292EL5 |
| 400 | 220 | 0.22      | 18.0       | 13.5    | 7.5     | 15.0    | 176.0        | 800   | 0.8       | FGB2GK224E292EL5 |
| 400 | 220 | 0.27      | 18.0       | 13.5    | 7.5     | 15.0    | 216.0        | 800   | 0.8       | FGB2GK274E292EL5 |
| 400 | 220 | 0.33      | 18.0       | 14.5    | 8.5     | 15.0    | 264.0        | 800   | 0.8       | FGB2GK334E342EL5 |
| 400 | 220 | 0.39      | 18.0       | 16.0    | 10.0    | 15.0    | 312.0        | 800   | 0.8       | FGB2GK394E432EL5 |
| 400 | 220 | 0.47      | 18.0       | 16.0    | 10.0    | 15.0    | 376.0        | 800   | 0.8       | FGB2GK474E432EL5 |
| 400 | 220 | 0.56      | 18.0       | 19.0    | 11.0    | 15.0    | 448.0        | 800   | 0.8       | FGB2GK564E472EL5 |
| 400 | 220 | 0.68      | 26.0       | 19.0    | 10.0    | 22.5    | 204.0        | 300   | 0.8       | FGB2GK684F242FL5 |
| 400 | 220 | 0.82      | 26.0       | 19.0    | 10.0    | 22.5    | 246.0        | 300   | 0.8       | FGB2GK824F242FL5 |
| 400 | 220 | 1.0       | 26.0       | 20.0    | 11.0    | 22.5    | 300.0        | 300   | 0.8       | FGB2GK105F262FL5 |
| 400 | 220 | 1.2       | 26.0       | 23.0    | 13.0    | 22.5    | 360.0        | 300   | 0.8       | FGB2GK125F292FL5 |
| 400 | 220 | 1.5       | 26.0       | 23.0    | 13.0    | 22.5    | 450.0        | 300   | 0.8       | FGB2GK155F292FL5 |
| 400 | 220 | 1.8       | 32.0       | 22.0    | 13.0    | 27.5    | 234.0        | 130   | 0.8       | FGB2GK185G212GL5 |
| 400 | 220 | 2.2       | 32.0       | 24.5    | 13.0    | 27.5    | 286.0        | 130   | 0.8       | FGB2GK225G222GL5 |

## Rating and Part Number

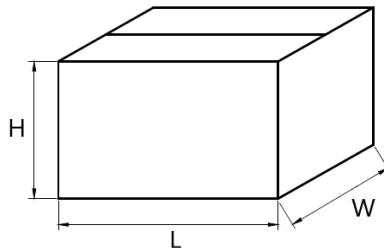
| Vdc | Vac | Cap Value | Dimensions |         |         |         | Peak Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|---------|---------|---------|--------------|-------|-----------|------------------|
|     |     |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |       |           |                  |
| 400 | 220 | 2.7       | 32.0       | 28.0    | 14.0    | 27.5    | 351.0        | 130   | 0.8       | FGB2GK275G262GL5 |
| 400 | 220 | 3.3       | 32.0       | 33.0    | 18.0    | 27.5    | 429.0        | 130   | 0.8       | FGB2GK335G342GL5 |
| 400 | 220 | 3.9       | 32.0       | 33.0    | 18.0    | 27.5    | 507.0        | 130   | 0.8       | FGB2GK395G342GL5 |
| 400 | 220 | 4.7       | 32.0       | 37.0    | 22.0    | 27.5    | 611.0        | 130   | 0.8       | FGB2GK475G402GL5 |
| 400 | 220 | 5.6       | 42.0       | 32.0    | 19.0    | 37.5    | 392.0        | 70    | 1.0       | FGB2GK565K212KL5 |
| 400 | 220 | 6.8       | 42.0       | 40.0    | 20.0    | 37.5    | 476.0        | 70    | 1.0       | FGB2GK685K242KL5 |
| 400 | 220 | 8.2       | 42.0       | 40.0    | 20.0    | 37.5    | 574.0        | 70    | 1.0       | FGB2GK825K242KL5 |
| 400 | 220 | 10        | 42.0       | 44.0    | 24.0    | 37.5    | 700.0        | 70    | 1.0       | FGB2GK106K322KL5 |
| 400 | 220 | 12        | 42.0       | 45.0    | 30.0    | 37.5    | 840.0        | 70    | 1.0       | FGB2GK126K422KL5 |
| 630 | 250 | 0.01      | 13.0       | 11.0    | 5.0     | 10.0    | 15.0         | 1500  | 0.6       | FGB2LK103C132CL5 |
| 630 | 250 | 0.012     | 13.0       | 11.0    | 5.0     | 10.0    | 18.0         | 1500  | 0.6       | FGB2LK123C132CL5 |
| 630 | 250 | 0.015     | 13.0       | 11.0    | 5.0     | 10.0    | 22.5         | 1500  | 0.6       | FGB2LK153C132CL5 |
| 630 | 250 | 0.018     | 13.0       | 11.0    | 5.0     | 10.0    | 27.0         | 1500  | 0.6       | FGB2LK183C132CL5 |
| 630 | 250 | 0.022     | 13.0       | 12.0    | 6.0     | 10.0    | 33.0         | 1500  | 0.6       | FGB2LK223C162CL5 |
| 630 | 250 | 0.027     | 18.0       | 11.0    | 5.0     | 15.0    | 27.0         | 1000  | 0.6       | FGB2LK273E142EL5 |
| 630 | 250 | 0.033     | 18.0       | 11.0    | 5.0     | 15.0    | 33.0         | 1000  | 0.6       | FGB2LK333E142EL5 |
| 630 | 250 | 0.039     | 18.0       | 11.0    | 5.0     | 15.0    | 39.0         | 1000  | 0.6       | FGB2LK393E142EL5 |
| 630 | 250 | 0.047     | 18.0       | 11.0    | 5.0     | 15.0    | 47.0         | 1000  | 0.6       | FGB2LK473E142EL5 |
| 630 | 250 | 0.056     | 18.0       | 11.0    | 5.0     | 15.0    | 56.0         | 1000  | 0.6       | FGB2LK563E142EL5 |
| 630 | 250 | 0.068     | 18.0       | 12.0    | 6.0     | 15.0    | 68.0         | 1000  | 0.6       | FGB2LK683E172EL5 |
| 630 | 250 | 0.082     | 18.0       | 12.0    | 6.0     | 15.0    | 82.0         | 1000  | 0.6       | FGB2LK823E172EL5 |
| 630 | 250 | 0.1       | 18.0       | 13.5    | 7.5     | 15.0    | 100.0        | 1000  | 0.8       | FGB2LK104E292EL5 |
| 630 | 250 | 0.12      | 18.0       | 13.5    | 7.5     | 15.0    | 120.0        | 1000  | 0.8       | FGB2LK124E292EL5 |
| 630 | 250 | 0.15      | 18.0       | 14.5    | 8.5     | 15.0    | 150.0        | 1000  | 0.8       | FGB2LK154E342EL5 |
| 630 | 250 | 0.18      | 18.0       | 16.0    | 10.0    | 15.0    | 180.0        | 1000  | 0.8       | FGB2LK184E432EL5 |
| 630 | 250 | 0.22      | 18.0       | 16.0    | 10.0    | 15.0    | 220.0        | 1000  | 0.8       | FGB2LK224E432EL5 |
| 630 | 250 | 0.27      | 18.0       | 19.0    | 11.0    | 15.0    | 270.0        | 1000  | 0.8       | FGB2LK274E472EL5 |
| 630 | 250 | 0.33      | 18.0       | 19.0    | 11.0    | 15.0    | 330.0        | 1000  | 0.8       | FGB2LK334E472EL5 |
| 630 | 250 | 0.39      | 26.0       | 19.0    | 10.0    | 22.5    | 156.0        | 400   | 0.8       | FGB2LK394F242FL5 |
| 630 | 250 | 0.47      | 26.0       | 20.0    | 11.0    | 22.5    | 188.0        | 400   | 0.8       | FGB2LK474F262FL5 |
| 630 | 250 | 0.56      | 26.0       | 20.0    | 11.0    | 22.5    | 224.0        | 400   | 0.8       | FGB2LK564F262FL5 |
| 630 | 250 | 0.68      | 26.0       | 23.0    | 13.0    | 22.5    | 272.0        | 400   | 0.8       | FGB2LK684F292FL5 |
| 630 | 250 | 0.82      | 32.0       | 22.0    | 13.0    | 27.5    | 147.6        | 180   | 0.8       | FGB2LK824G212GL5 |
| 630 | 250 | 10        | 32.0       | 22.0    | 13.0    | 27.5    | 1800.0       | 180   | 0.8       | FGB2LK105G212GL5 |
| 630 | 250 | 12        | 32.0       | 28.0    | 14.0    | 27.5    | 2160.0       | 180   | 0.8       | FGB2LK125G262GL5 |
| 630 | 250 | 1.5       | 32.0       | 28.0    | 14.0    | 27.5    | 270.0        | 180   | 0.8       | FGB2LK155G262GL5 |
| 630 | 250 | 1.8       | 32.0       | 33.0    | 18.0    | 27.5    | 324.0        | 180   | 0.8       | FGB2LK185G342GL5 |
| 630 | 250 | 2.2       | 32.0       | 33.0    | 18.0    | 27.5    | 396.0        | 180   | 0.8       | FGB2LK225G342GL5 |
| 630 | 250 | 2.7       | 32.0       | 37.0    | 22.0    | 27.5    | 486.0        | 180   | 0.8       | FGB2LK275G402GL5 |
| 630 | 250 | 3.3       | 42.0       | 32.0    | 19.0    | 37.5    | 297.0        | 90    | 1.0       | FGB2LK335K212KL5 |
| 630 | 250 | 3.9       | 42.0       | 40.0    | 20.0    | 37.5    | 351.0        | 90    | 1.0       | FGB2LK395K242KL5 |
| 630 | 250 | 4.7       | 42.0       | 40.0    | 20.0    | 37.5    | 423.0        | 90    | 1.0       | FGB2LK475K242KL5 |
| 630 | 250 | 5.6       | 42.0       | 44.0    | 24.0    | 37.5    | 504.0        | 90    | 1.0       | FGB2LK565K322KL5 |
| 630 | 250 | 6.8       | 42.0       | 45.0    | 30.0    | 37.5    | 612.0        | 90    | 1.0       | FGB2LK685K422KL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 10    | C13       | 13        | 11   | 5   |                    | 1,200       | 1,488     |
|       | C16       | 13        | 12   | 6   |                    | 1,200       | 1,224     |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F20       | 26        | 17   | 8.5 |                    | 432         | 250       |
|       | F24       | 26        | 19   | 10  |                    | 372         | 210       |
|       | F26       | 26        | 20   | 11  |                    | 336         | 190       |
|       | F29       | 26        | 23   | 13  |                    | 276         | 160       |
| 27.5  | G18       | 32        | 20   | 11  |                    | 280         | 190       |
|       | G21       | 32        | 22   | 13  |                    | 230         | 160       |
|       | G22       | 32        | 24.5 | 13  |                    | 230         | 160       |
|       | G26       | 32        | 28   | 14  |                    | 220         | 150       |
|       | G34       | 32        | 33   | 18  |                    | 170         | 110       |
|       | G37       | 32        | 31   | 21  |                    | 140         | 90        |
|       | G40       | 32        | 37   | 22  |                    | 140         | 90        |
| 37.5  | K21       | 42        | 32   | 19  |                    | 112         |           |
|       | K24       | 42        | 40   | 20  |                    | 105         |           |
|       | K32       | 42        | 44   | 24  |                    | 91          |           |
|       | K42       | 42        | 45   | 30  |                    | 70          |           |

## Overview

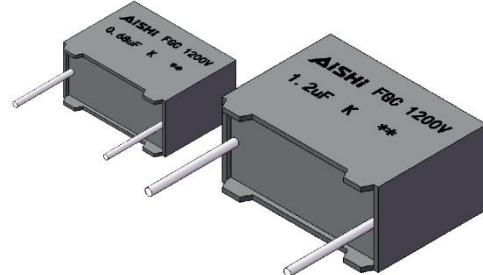
The FGC series is constructed of metallized polypropylene film and double-sided metallized film as electrodes with radial leads of tinned wires. The capacitor is encapsulated in plastic cases, sealed with epoxy resin.

## Applications

Widely used in monitors (S-correction and flyback tuning), ballasts and compacts lamps, snubber and power supplies

## Features

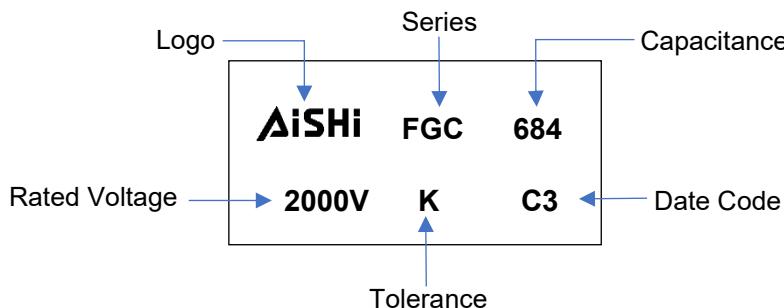
- High ripple current
- Self-healing property
- Low losses
- High contact reliability
- Suitable for high frequency applications
- Negative temperature coefficient of capacitance



## General Technical Data

|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film   |
| Voltage Range               | 630Vdc to 2000Vdc   |
| Capacitance Range           | 0.001μF to 4.7μF  |
| Capacitance Tolerance       | ±5% or ±10% at +25°C  |
| Operating Temperature Range | -55°C ~ +105°C<br>(85°C ~105°C, decreasing factor 1.25% per °C for Rated Voltage)   |
| Climatic Category           | 55/105/56 IEC 60068-1   |
| Dissipation Factor          | 0.0010 (0.1%) at 25°C, 1KHz   |
| Insulation Resistance       | R between leads, for C ≤ 0.33 μF at 100 V; 1 min > 100 000 MΩ<br>RC between leads, for C > 0.33 μF at 100 V; 1 min > 30 000 s |

## Marking



## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Part Number System

| F              | GC  | 3D   | K                   | 684   | K42                      | 2KL                          | 5                               |
|----------------|---|--|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series  | Voltage (VDC)                                      | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | DC Film,<br>Double Sided<br>Metallized<br>PP Film | 630=2L<br>1000=3K<br>1200=3B<br>1600=3W<br>2000=3D | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

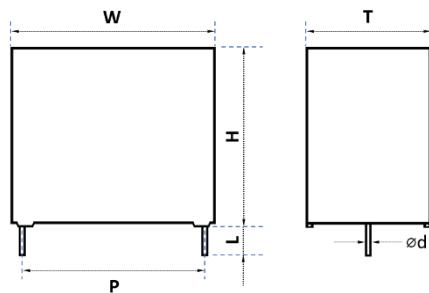
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 10.0mm                    | C | N/A                               | L |
| 2 leads for straight cut          | 2 | 12.5mm                    | D |                                   |   |
| 2 leads for forming cut           | E | 15.0mm                    | E |                                   |   |
| 2 leads for taping forming        | T | 22.5mm                    | F |                                   |   |
| 2 leads for taping straight       | V | 27.5mm                    | G |                                   |   |
|                                   |   | 37.5mm                    | K |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 3.2mm       | 1 |
| 3.5mm       | 2 |
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |           |      |           |     |           | Pitch |           | Lead Wire |           |
|-----------|-----------|-----------|------|-----------|-----|-----------|-------|-----------|-----------|-----------|
|           | W         | Tolerance | H    | Tolerance | T   | Tolerance | P     | Tolerance | Ød        | Tolerance |
| C13       | 13        | 0.5       | 11   | 0.5       | 5   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C16       | 13        | 0.5       | 12   | 0.5       | 6   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| C24       | 13        | 0.5       | 13   | 0.5       | 7   | 0.5       | 10    | 0.5       | 0.6       | 0.05      |
| E14       | 18        | 0.5       | 11   | 0.5       | 5   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E17       | 18        | 0.5       | 12   | 0.5       | 6   | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E29       | 18        | 0.5       | 13.5 | 0.5       | 7.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E34       | 18        | 0.5       | 14.5 | 0.5       | 8.5 | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E43       | 18        | 0.5       | 16   | 0.5       | 10  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| E47       | 18        | 0.5       | 19   | 0.5       | 11  | 0.5       | 15    | 0.5       | 0.8       | 0.05      |
| F14       | 26        | 0.5       | 15.5 | 0.5       | 6   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F17       | 26        | 0.5       | 16.5 | 0.5       | 7   | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F20       | 26        | 0.5       | 17   | 0.5       | 8.5 | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F24       | 26        | 0.5       | 19   | 0.5       | 10  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F26       | 26        | 0.5       | 20   | 0.5       | 11  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| F27       | 26        | 0.5       | 22   | 0.5       | 12  | 0.5       | 22.5  | 0.5       | 0.8       | 0.05      |
| G14       | 32        | 0.8       | 17   | 0.8       | 8   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G15       | 32        | 0.8       | 18   | 0.8       | 9   | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G18       | 32        | 0.8       | 20   | 0.8       | 11  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G21       | 32        | 0.8       | 22   | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G22       | 32        | 0.8       | 24.5 | 0.8       | 13  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G26       | 32        | 0.8       | 28   | 0.8       | 14  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G34       | 32        | 0.8       | 33   | 0.8       | 18  | 0.8       | 27.5  | 0.5       | 0.8       | 0.05      |
| G40       | 32        | 0.8       | 37   | 0.8       | 22  | 0.8       | 27.5  | 0.5       | 1.0       | 0.05      |
| K11       | 42        | 0.8       | 24   | 0.8       | 13  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K17       | 42        | 0.8       | 28   | 0.8       | 17  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K21       | 42        | 0.8       | 32   | 0.8       | 19  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K24       | 42        | 0.8       | 40   | 0.8       | 20  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K32       | 42        | 0.8       | 44   | 0.8       | 24  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K42       | 42        | 0.8       | 45   | 0.8       | 30  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K47       | 42        | 0.8       | 50   | 0.8       | 35  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K85       | 42        | 0.8       | 22   | 0.8       | 11  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |
| K86       | 42        | 0.8       | 28.5 | 0.8       | 16  | 0.8       | 37.5  | 0.5       | 1.0       | 0.05      |

## Rating and Part Number

| Vdc | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|     |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|     |     |           | μF         | mm   | mm  | mm   | 70°C A         | A            | mΩ                               | nH   | V/us  | mm        |                  |
| 630 | 400 | 0.0039    | 13         | 11   | 5   | 10   | 1.0            | 15.6         | 160.0                            | 10.0 | 4000  | 0.6       | FGC2LK392C132CL5 |
| 630 | 400 | 0.0047    | 13         | 11   | 5   | 10   | 1.2            | 18.8         | 135.0                            | 10.0 | 4000  | 0.6       | FGC2LK472C132CL5 |
| 630 | 400 | 0.0056    | 13         | 11   | 5   | 10   | 1.3            | 22.4         | 110.0                            | 10.0 | 4000  | 0.6       | FGC2LK562C132CL5 |
| 630 | 400 | 0.0068    | 13         | 11   | 5   | 10   | 1.4            | 27.2         | 93.0                             | 10.0 | 4000  | 0.6       | FGC2LK682C132CL5 |
| 630 | 400 | 0.0082    | 13         | 11   | 5   | 10   | 1.5            | 32.8         | 80.0                             | 10.0 | 4000  | 0.6       | FGC2LK822C132CL5 |
| 630 | 400 | 0.01      | 13         | 11   | 5   | 10   | 1.8            | 40.0         | 65.0                             | 10.0 | 4000  | 0.6       | FGC2LK103C132CL5 |
| 630 | 400 | 0.012     | 13         | 11   | 5   | 10   | 2.0            | 48.0         | 55.0                             | 10.0 | 4000  | 0.6       | FGC2LK123C132CL5 |
| 630 | 400 | 0.015     | 13         | 12   | 6   | 10   | 2.4            | 60.0         | 45.0                             | 10.0 | 4000  | 0.6       | FGC2LK153C162CL5 |
| 630 | 400 | 0.018     | 13         | 12   | 6   | 10   | 2.6            | 72.0         | 35.0                             | 10.0 | 4000  | 0.6       | FGC2LK183C162CL5 |
| 630 | 400 | 0.02      | 13         | 13   | 7   | 10   | 2.7            | 80.0         | 32.0                             | 10.0 | 4000  | 0.6       | FGC2LK203C242CL5 |
| 630 | 400 | 0.022     | 13         | 13   | 7   | 10   | 2.8            | 88.0         | 30.0                             | 10.0 | 4000  | 0.6       | FGC2LK223C242CL5 |
| 630 | 400 | 0.01      | 18         | 11   | 5   | 15   | 1.8            | 30.0         | 62.0                             | 12.0 | 3000  | 0.8       | FGC2LK103E142EL5 |
| 630 | 400 | 0.012     | 18         | 11   | 5   | 15   | 2.2            | 36.0         | 52.0                             | 12.0 | 3000  | 0.8       | FGC2LK123E142EL5 |
| 630 | 400 | 0.015     | 18         | 11   | 5   | 15   | 2.5            | 45.0         | 42.0                             | 12.0 | 3000  | 0.8       | FGC2LK153E142EL5 |
| 630 | 400 | 0.018     | 18         | 11   | 5   | 15   | 2.7            | 54.0         | 35.0                             | 12.0 | 3000  | 0.8       | FGC2LK183E142EL5 |
| 630 | 400 | 0.02      | 18         | 11   | 5   | 15   | 2.8            | 60.0         | 32.0                             | 12.0 | 3000  | 0.8       | FGC2LK203E142EL5 |
| 630 | 400 | 0.022     | 18         | 11   | 5   | 15   | 2.9            | 66.0         | 30.0                             | 12.0 | 3000  | 0.8       | FGC2LK223E142EL5 |
| 630 | 400 | 0.027     | 18         | 12   | 6   | 15   | 3.2            | 81.0         | 25.0                             | 12.0 | 3000  | 0.8       | FGC2LK273E172EL5 |
| 630 | 400 | 0.033     | 18         | 12   | 6   | 15   | 3.7            | 99.0         | 20.0                             | 12.0 | 3000  | 0.8       | FGC2LK333E172EL5 |
| 630 | 400 | 0.039     | 18         | 12   | 6   | 15   | 3.9            | 117.0        | 16.0                             | 12.0 | 3000  | 0.8       | FGC2LK393E172EL5 |
| 630 | 400 | 0.047     | 18         | 13.5 | 7.5 | 15   | 4.5            | 141.0        | 15.0                             | 12.0 | 3000  | 0.8       | FGC2LK473E292EL5 |
| 630 | 400 | 0.056     | 18         | 13.5 | 7.5 | 15   | 4.6            | 168.0        | 14.0                             | 12.0 | 3000  | 0.8       | FGC2LK563E292EL5 |
| 630 | 400 | 0.068     | 18         | 14.5 | 8.5 | 15   | 4.7            | 204.0        | 13.5                             | 12.0 | 3000  | 0.8       | FGC2LK683E342EL5 |
| 630 | 400 | 0.082     | 18         | 16   | 10  | 15   | 4.8            | 246.0        | 13.2                             | 12.0 | 3000  | 0.8       | FGC2LK823E432EL5 |
| 630 | 400 | 0.1       | 18         | 16   | 10  | 15   | 5.0            | 300.0        | 13.0                             | 12.0 | 3000  | 0.8       | FGC2LK104E432EL5 |
| 630 | 400 | 0.12      | 18         | 19   | 11  | 15   | 5.4            | 360.0        | 12.5                             | 12.0 | 3000  | 0.8       | FGC2LK124E472EL5 |
| 630 | 400 | 0.047     | 26         | 15.5 | 6   | 22.5 | 3.8            | 70.5         | 20.0                             | 15.0 | 1500  | 0.8       | FGC2LK473F142FL5 |
| 630 | 400 | 0.056     | 26         | 15.5 | 6   | 22.5 | 4.0            | 84.0         | 19.5                             | 15.0 | 1500  | 0.8       | FGC2LK563F142FL5 |
| 630 | 400 | 0.068     | 26         | 15.5 | 6   | 22.5 | 4.2            | 102.0        | 19.0                             | 15.0 | 1500  | 0.8       | FGC2LK683F142FL5 |
| 630 | 400 | 0.082     | 26         | 15.5 | 6   | 22.5 | 4.5            | 123.0        | 18.0                             | 15.0 | 1500  | 0.8       | FGC2LK823F142FL5 |
| 630 | 400 | 0.1       | 26         | 15.5 | 6   | 22.5 | 5.0            | 150.0        | 16.0                             | 15.0 | 1500  | 0.8       | FGC2LK104F142FL5 |
| 630 | 400 | 0.12      | 26         | 16.5 | 7   | 22.5 | 5.3            | 180.0        | 14.0                             | 15.0 | 1500  | 0.8       | FGC2LK124F172FL5 |
| 630 | 400 | 0.15      | 26         | 17   | 8.5 | 22.5 | 6.0            | 225.0        | 11.0                             | 15.0 | 1500  | 0.8       | FGC2LK154F202FL5 |
| 630 | 400 | 0.18      | 26         | 17   | 8.5 | 22.5 | 6.5            | 270.0        | 10.0                             | 15.0 | 1500  | 0.8       | FGC2LK184F202FL5 |
| 630 | 400 | 0.22      | 26         | 19   | 10  | 22.5 | 7.5            | 330.0        | 8.5                              | 15.0 | 1500  | 0.8       | FGC2LK224F242FL5 |
| 630 | 400 | 0.27      | 26         | 20   | 11  | 22.5 | 8.5            | 405.0        | 6.5                              | 15.0 | 1500  | 0.8       | FGC2LK274F262FL5 |
| 630 | 400 | 0.33      | 26         | 20   | 11  | 22.5 | 9.0            | 495.0        | 6.0                              | 15.0 | 1500  | 0.8       | FGC2LK334F262FL5 |
| 630 | 400 | 0.39      | 26         | 22   | 12  | 22.5 | 10.0           | 585.0        | 5.0                              | 15.0 | 1500  | 0.8       | FGC2LK394F272FL5 |
| 630 | 400 | 0.15      | 32         | 17   | 8   | 27.5 | 4.6            | 135.0        | 25.0                             | 20.0 | 900   | 0.8       | FGC2LK154G142GL5 |
| 630 | 400 | 0.18      | 32         | 17   | 8   | 27.5 | 4.8            | 162.0        | 22.0                             | 20.0 | 900   | 0.8       | FGC2LK184G142GL5 |
| 630 | 400 | 0.22      | 32         | 18   | 9   | 27.5 | 5.0            | 198.0        | 20.0                             | 20.0 | 900   | 0.8       | FGC2LK224G152GL5 |
| 630 | 400 | 0.27      | 32         | 20   | 11  | 27.5 | 5.5            | 243.0        | 17.5                             | 20.0 | 900   | 0.8       | FGC2LK274G182GL5 |
| 630 | 400 | 0.33      | 32         | 20   | 11  | 27.5 | 5.8            | 297.0        | 16.5                             | 20.0 | 900   | 0.8       | FGC2LK334G182GL5 |
| 630 | 400 | 0.39      | 32         | 20   | 11  | 27.5 | 6.0            | 351.0        | 16.0                             | 20.0 | 900   | 0.8       | FGC2LK394G182GL5 |
| 630 | 400 | 0.47      | 32         | 22   | 13  | 27.5 | 6.5            | 423.0        | 14.0                             | 20.0 | 900   | 0.8       | FGC2LK474G212GL5 |
| 630 | 400 | 0.56      | 32         | 22   | 13  | 27.5 | 7.0            | 504.0        | 12.0                             | 20.0 | 900   | 0.8       | FGC2LK564G212GL5 |
| 630 | 400 | 0.68      | 32         | 24.5 | 13  | 27.5 | 7.5            | 612.0        | 10.5                             | 20.0 | 900   | 0.8       | FGC2LK684G222GL5 |
| 630 | 400 | 0.82      | 32         | 28   | 14  | 27.5 | 8.5            | 738.0        | 9.0                              | 20.0 | 900   | 0.8       | FGC2LK824G262GL5 |
| 630 | 400 | 1         | 32         | 33   | 18  | 27.5 | 10.0           | 900.0        | 7.0                              | 20.0 | 900   | 0.8       | FGC2LK105G342GL5 |
| 630 | 400 | 1.2       | 32         | 33   | 18  | 27.5 | 13.0           | 1080.0       | 6.0                              | 20.0 | 900   | 0.8       | FGC2LK125G342GL5 |
| 630 | 400 | 1.5       | 32         | 37   | 22  | 27.5 | 15.0           | 1350.0       | 5.0                              | 20.0 | 900   | 1.0       | FGC2LK155G402GL5 |
| 630 | 400 | 1.8       | 32         | 37   | 22  | 27.5 | 16.0           | 1620.0       | 4.0                              | 20.0 | 900   | 1.0       | FGC2LK185G402GL5 |
| 630 | 400 | 0.33      | 42         | 22   | 11  | 37.5 | 6.8            | 165.0        | 13.0                             | 25.0 | 500   | 1.0       | FGC2LK334K852KL5 |
| 630 | 400 | 0.47      | 42         | 22   | 11  | 37.5 | 7.0            | 235.0        | 12.5                             | 25.0 | 500   | 1.0       | FGC2LK474K852KL5 |
| 630 | 400 | 0.56      | 42         | 22   | 11  | 37.5 | 7.5            | 280.0        | 11.0                             | 25.0 | 500   | 1.0       | FGC2LK564K852KL5 |
| 630 | 400 | 0.68      | 42         | 22   | 11  | 37.5 | 8.0            | 340.0        | 10.5                             | 25.0 | 500   | 1.0       | FGC2LK684K852KL5 |

## Rating and Part Number

| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|      |     |           | μF         | mm   | mm  | mm   | 70°C A         | A            | mΩ                               | nH   | V/us  | mm        |                  |
| 630  | 400 | 0.82      | 42         | 28.5 | 16  | 37.5 | 8.0            | 410.0        | 10.5                             | 25.0 | 500   | 1.0       | FGC2LK824K862KL5 |
| 630  | 400 | 1.0       | 42         | 28.5 | 16  | 37.5 | 8.5            | 500.0        | 10.0                             | 25.0 | 500   | 1.0       | FGC2LK105K862KL5 |
| 630  | 400 | 1.5       | 42         | 28.5 | 16  | 37.5 | 9.5            | 750.0        | 9.0                              | 25.0 | 500   | 1.0       | FGC2LK155K862KL5 |
| 630  | 400 | 1.8       | 42         | 32   | 19  | 37.5 | 10.5           | 900.0        | 8.5                              | 25.0 | 500   | 1.0       | FGC2LK185K212KL5 |
| 630  | 400 | 2.2       | 42         | 40   | 20  | 37.5 | 11.5           | 1100.0       | 8.0                              | 25.0 | 500   | 1.0       | FGC2LK225K242KL5 |
| 630  | 400 | 2.7       | 42         | 40   | 20  | 37.5 | 13.0           | 1350.0       | 7.0                              | 25.0 | 500   | 1.0       | FGC2LK275K242KL5 |
| 630  | 400 | 3.3       | 42         | 44   | 24  | 37.5 | 14.0           | 1650.0       | 6.0                              | 25.0 | 500   | 1.0       | FGC2LK335K322KL5 |
| 630  | 400 | 3.9       | 42         | 45   | 30  | 37.5 | 15.0           | 1950.0       | 5.0                              | 25.0 | 500   | 1.0       | FGC2LK395K422KL5 |
| 630  | 400 | 4.7       | 42         | 50   | 35  | 37.5 | 16.0           | 2350.0       | 4.0                              | 25.0 | 500   | 1.0       | FGC2LK475K472KL5 |
| 1000 | 600 | 0.0039    | 13         | 11   | 5   | 10   | 1.0            | 25.4         | 160.0                            | 10.0 | 6500  | 0.6       | FGC3KK392C132CL5 |
| 1000 | 600 | 0.0047    | 13         | 11   | 5   | 10   | 1.2            | 30.6         | 135.0                            | 10.0 | 6500  | 0.6       | FGC3KK472C132CL5 |
| 1000 | 600 | 0.0056    | 13         | 12   | 6   | 10   | 1.3            | 36.4         | 110.0                            | 10.0 | 6500  | 0.6       | FGC3KK562C162CL5 |
| 1000 | 600 | 0.0068    | 13         | 12   | 6   | 10   | 1.4            | 44.2         | 93.0                             | 10.0 | 6500  | 0.6       | FGC3KK682C162CL5 |
| 1000 | 600 | 0.0082    | 18         | 11   | 5   | 15   | 1.5            | 28.7         | 80.0                             | 10.0 | 3500  | 0.8       | FGC3KK822E142EL5 |
| 1000 | 600 | 0.01      | 18         | 11   | 5   | 15   | 1.8            | 35.0         | 62.0                             | 12.0 | 3500  | 0.8       | FGC3KK103E142EL5 |
| 1000 | 600 | 0.012     | 18         | 11   | 5   | 15   | 2.2            | 42.0         | 52.0                             | 12.0 | 3500  | 0.8       | FGC3KK123E142EL5 |
| 1000 | 600 | 0.015     | 18         | 11   | 5   | 15   | 2.5            | 52.5         | 42.0                             | 12.0 | 3500  | 0.8       | FGC3KK153E142EL5 |
| 1000 | 600 | 0.018     | 18         | 11   | 5   | 15   | 2.7            | 63.0         | 35.0                             | 12.0 | 3500  | 0.8       | FGC3KK183E142EL5 |
| 1000 | 600 | 0.02      | 18         | 12   | 6   | 15   | 2.8            | 70.0         | 32.0                             | 10.0 | 3500  | 0.8       | FGC3KK203E172EL5 |
| 1000 | 600 | 0.022     | 18         | 12   | 6   | 15   | 3.0            | 77.0         | 29.0                             | 10.0 | 3500  | 0.8       | FGC3KK223E172EL5 |
| 1000 | 600 | 0.027     | 18         | 13.5 | 7.5 | 15   | 3.5            | 94.5         | 24.0                             | 12.0 | 3500  | 0.8       | FGC3KK273E292EL5 |
| 1000 | 600 | 0.033     | 18         | 13.5 | 7.5 | 15   | 4.0            | 115.5        | 19.0                             | 12.0 | 3500  | 0.8       | FGC3KK333E292EL5 |
| 1000 | 600 | 0.039     | 18         | 14.5 | 8.5 | 15   | 4.5            | 136.5        | 16.0                             | 12.0 | 3500  | 0.8       | FGC3KK393E342EL5 |
| 1000 | 600 | 0.047     | 18         | 14.5 | 8.5 | 15   | 4.9            | 164.5        | 14.0                             | 12.0 | 3500  | 0.8       | FGC3KK473E342EL5 |
| 1000 | 600 | 0.027     | 26         | 15.5 | 6   | 22.5 | 3.8            | 56.7         | 24.0                             | 15.0 | 2100  | 0.8       | FGC3KK273F142FL5 |
| 1000 | 600 | 0.033     | 26         | 15.5 | 6   | 22.5 | 4.3            | 69.3         | 19.0                             | 15.0 | 2100  | 0.8       | FGC3KK333F142FL5 |
| 1000 | 600 | 0.039     | 26         | 15.5 | 6   | 22.5 | 4.8            | 81.9         | 16.0                             | 15.0 | 2100  | 0.8       | FGC3KK393F142FL5 |
| 1000 | 600 | 0.047     | 26         | 16.5 | 7   | 22.5 | 5.0            | 98.7         | 15.0                             | 15.0 | 2100  | 0.8       | FGC3KK473F172FL5 |
| 1000 | 600 | 0.056     | 26         | 16.5 | 7   | 22.5 | 5.4            | 117.6        | 14.5                             | 15.0 | 2100  | 0.8       | FGC3KK563F172FL5 |
| 1000 | 600 | 0.068     | 26         | 17   | 8.5 | 22.5 | 5.6            | 142.8        | 14.0                             | 15.0 | 2100  | 0.8       | FGC3KK683F202FL5 |
| 1000 | 600 | 0.082     | 26         | 19   | 10  | 22.5 | 5.8            | 172.2        | 13.5                             | 15.0 | 2100  | 0.8       | FGC3KK823F242FL5 |
| 1000 | 600 | 0.1       | 26         | 19   | 10  | 22.5 | 6.0            | 210.0        | 13.0                             | 15.0 | 2100  | 0.8       | FGC3KK104F242FL5 |
| 1000 | 600 | 0.12      | 26         | 20   | 11  | 22.5 | 6.5            | 180.0        | 12.5                             | 15.0 | 1500  | 0.8       | FGC3KK124F262FL5 |
| 1000 | 600 | 0.15      | 26         | 22   | 12  | 22.5 | 7.0            | 225.0        | 11.0                             | 15.0 | 1500  | 0.8       | FGC3KK154F272FL5 |
| 1000 | 600 | 0.1       | 32         | 17   | 8   | 27.5 | 4.5            | 90.0         | 25.0                             | 20.0 | 900   | 0.8       | FGC3KK104G142GL5 |
| 1000 | 600 | 0.12      | 32         | 18   | 9   | 27.5 | 4.8            | 108.0        | 22.0                             | 20.0 | 900   | 0.8       | FGC3KK124G152GL5 |
| 1000 | 600 | 0.15      | 32         | 20   | 11  | 27.5 | 5.0            | 135.0        | 21.0                             | 20.0 | 900   | 0.8       | FGC3KK154G182GL5 |
| 1000 | 600 | 0.18      | 32         | 22   | 13  | 27.5 | 5.5            | 162.0        | 18.0                             | 20.0 | 900   | 0.8       | FGC3KK184G212GL5 |
| 1000 | 600 | 0.22      | 32         | 22   | 13  | 27.5 | 6.0            | 198.0        | 14.0                             | 20.0 | 900   | 0.8       | FGC3KK224G212GL5 |
| 1000 | 600 | 0.27      | 32         | 24.5 | 13  | 27.5 | 6.5            | 243.0        | 13.5                             | 20.0 | 900   | 0.8       | FGC3KK274G222GL5 |
| 1000 | 600 | 0.33      | 32         | 28   | 14  | 27.5 | 7.0            | 297.0        | 12.0                             | 20.0 | 900   | 0.8       | FGC3KK334G262GL5 |
| 1000 | 600 | 0.39      | 32         | 33   | 18  | 27.5 | 7.5            | 351.0        | 11.0                             | 20.0 | 900   | 0.8       | FGC3KK394G342GL5 |
| 1000 | 600 | 0.47      | 32         | 33   | 18  | 27.5 | 8.0            | 423.0        | 10.0                             | 20.0 | 900   | 1.0       | FGC3KK474G342GL5 |
| 1000 | 600 | 0.56      | 32         | 37   | 22  | 27.5 | 8.5            | 504.0        | 9.0                              | 20.0 | 900   | 1.0       | FGC3KK564G402GL5 |
| 1000 | 600 | 0.68      | 32         | 37   | 22  | 27.5 | 9.5            | 612.0        | 8.0                              | 20.0 | 900   | 1.0       | FGC3KK684G402GL5 |
| 1000 | 600 | 0.18      | 42         | 22   | 11  | 37.5 | 6.0            | 90.0         | 18.0                             | 25.0 | 500   | 1.0       | FGC3KK184K852KL5 |
| 1000 | 600 | 0.22      | 42         | 22   | 11  | 37.5 | 6.5            | 110.0        | 14.0                             | 25.0 | 500   | 1.0       | FGC3KK224K852KL5 |
| 1000 | 600 | 0.27      | 42         | 24   | 13  | 37.5 | 6.8            | 135.0        | 13.0                             | 25.0 | 500   | 1.0       | FGC3KK274K112KL5 |
| 1000 | 600 | 0.33      | 42         | 24   | 13  | 37.5 | 7.2            | 165.0        | 12.0                             | 25.0 | 500   | 1.0       | FGC3KK334K112KL5 |
| 1000 | 600 | 0.39      | 42         | 28   | 17  | 37.5 | 7.4            | 195.0        | 11.5                             | 25.0 | 500   | 1.0       | FGC3KK394K172KL5 |
| 1000 | 600 | 0.47      | 42         | 28   | 17  | 37.5 | 7.6            | 235.0        | 11.0                             | 25.0 | 500   | 1.0       | FGC3KK474K172KL5 |
| 1000 | 600 | 0.56      | 42         | 28   | 17  | 37.5 | 8.0            | 280.0        | 10.5                             | 25.0 | 500   | 1.0       | FGC3KK564K172KL5 |
| 1000 | 600 | 0.68      | 42         | 32   | 19  | 37.5 | 8.5            | 340.0        | 10.0                             | 25.0 | 500   | 1.0       | FGC3KK684K212KL5 |
| 1000 | 600 | 0.82      | 42         | 40   | 20  | 37.5 | 10.0           | 410.0        | 9.0                              | 25.0 | 500   | 1.0       | FGC3KK824K242KL5 |
| 1000 | 600 | 1.0       | 42         | 40   | 20  | 37.5 | 11.0           | 500.0        | 7.0                              | 25.0 | 500   | 1.0       | FGC3KK105K242KL5 |
| 1000 | 600 | 1.2       | 42         | 44   | 24  | 37.5 | 12.0           | 600.0        | 6.5                              | 25.0 | 500   | 1.0       | FGC3KK125K322KL5 |

## Rating and Part Number

| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|      |     |           | μF         | mm   | mm  | mm   | 70°C A         | A            | mΩ                               | nH   | V/us  | mm        |                  |
| 1000 | 600 | 1.5       | 42         | 44   | 24  | 37.5 | 13.0           | 750.0        | 6.0                              | 25.0 | 500   | 1.0       | FGC3KK155K322KL5 |
| 1000 | 600 | 1.8       | 42         | 45   | 30  | 37.5 | 15.0           | 900.0        | 5.0                              | 25.0 | 500   | 1.0       | FGC3KK185K422KL5 |
| 1000 | 600 | 2.2       | 42         | 45   | 30  | 37.5 | 16.0           | 1100.0       | 4.0                              | 25.0 | 500   | 1.0       | FGC3KK225K422KL5 |
| 1600 | 650 | 0.0033    | 18         | 11   | 5   | 15   | 1.1            | 19.8         | 190.0                            | 12.0 | 6000  | 0.8       | FGC3WK332E142EL5 |
| 1600 | 650 | 0.0047    | 18         | 11   | 5   | 15   | 1.3            | 28.2         | 165.0                            | 12.0 | 6000  | 0.8       | FGC3WK472E142EL5 |
| 1600 | 650 | 0.0056    | 18         | 11   | 5   | 15   | 1.4            | 33.6         | 120.0                            | 12.0 | 6000  | 0.8       | FGC3WK562E142EL5 |
| 1600 | 650 | 0.0068    | 18         | 11   | 5   | 15   | 1.6            | 40.8         | 100.0                            | 12.0 | 6000  | 0.8       | FGC3WK682E142EL5 |
| 1600 | 650 | 0.0082    | 18         | 11   | 5   | 15   | 1.8            | 49.2         | 95.0                             | 12.0 | 6000  | 0.8       | FGC3WK822E142EL5 |
| 1600 | 650 | 0.01      | 18         | 11   | 5   | 15   | 2.0            | 60.0         | 65.0                             | 12.0 | 6000  | 0.8       | FGC3WK103E142EL5 |
| 1600 | 650 | 0.012     | 18         | 12   | 6   | 15   | 2.3            | 72.0         | 50.0                             | 12.0 | 6000  | 0.8       | FGC3WK123E172EL5 |
| 1600 | 650 | 0.015     | 18         | 12   | 6   | 15   | 2.5            | 90.0         | 45.0                             | 12.0 | 6000  | 0.8       | FGC3WK153E172EL5 |
| 1600 | 650 | 0.018     | 18         | 13.5 | 7.5 | 15   | 3.0            | 108.0        | 35.0                             | 12.0 | 6000  | 0.8       | FGC3WK183E292EL5 |
| 1600 | 650 | 0.022     | 18         | 13.5 | 7.5 | 15   | 3.2            | 132.0        | 30.0                             | 12.0 | 6000  | 0.8       | FGC3WK223E292EL5 |
| 1600 | 650 | 0.027     | 18         | 14.5 | 8.5 | 15   | 3.8            | 162.0        | 25.0                             | 12.0 | 6000  | 0.8       | FGC3WK273E342EL5 |
| 1600 | 650 | 0.033     | 18         | 14.5 | 8.5 | 15   | 4.0            | 198.0        | 20.0                             | 12.0 | 6000  | 0.8       | FGC3WK333E342EL5 |
| 1600 | 650 | 0.015     | 26         | 15.5 | 6   | 22.5 | 2.8            | 45.0         | 40.0                             | 15.0 | 3000  | 0.8       | FGC3WK153F142FL5 |
| 1600 | 650 | 0.022     | 26         | 15.5 | 6   | 22.5 | 3.5            | 66.0         | 30.0                             | 15.0 | 3000  | 0.8       | FGC3WK223F142FL5 |
| 1600 | 650 | 0.033     | 26         | 15.5 | 6   | 22.5 | 4.0            | 99.0         | 20.0                             | 15.0 | 3000  | 0.8       | FGC3WK333F142FL5 |
| 1600 | 650 | 0.039     | 26         | 16.5 | 7   | 22.5 | 4.8            | 117.0        | 16.0                             | 15.0 | 3000  | 0.8       | FGC3WK393F172FL5 |
| 1600 | 650 | 0.047     | 26         | 16.5 | 7   | 22.5 | 5.2            | 141.0        | 15.0                             | 15.0 | 3000  | 0.8       | FGC3WK473F172FL5 |
| 1600 | 650 | 0.056     | 26         | 17   | 8.5 | 22.5 | 5.4            | 168.0        | 14.0                             | 15.0 | 3000  | 0.8       | FGC3WK563F202FL5 |
| 1600 | 650 | 0.068     | 26         | 19   | 10  | 22.5 | 5.8            | 204.0        | 13.0                             | 15.0 | 3000  | 0.8       | FGC3WK683F242FL5 |
| 1600 | 650 | 0.082     | 26         | 19   | 10  | 22.5 | 6.0            | 246.0        | 12.0                             | 15.0 | 3000  | 0.8       | FGC3WK823F242FL5 |
| 1600 | 650 | 0.1       | 26         | 20   | 11  | 22.5 | 6.5            | 300.0        | 11.0                             | 15.0 | 3000  | 0.8       | FGC3WK104F262FL5 |
| 1600 | 650 | 0.039     | 32         | 17   | 8   | 27.5 | 3.8            | 78.0         | 30.0                             | 20.0 | 2000  | 0.8       | FGC3WK393G142GL5 |
| 1600 | 650 | 0.047     | 32         | 17   | 8   | 27.5 | 4.0            | 94.0         | 29.0                             | 20.0 | 2000  | 0.8       | FGC3WK473G142GL5 |
| 1600 | 650 | 0.056     | 32         | 17   | 8   | 27.5 | 4.5            | 112.0        | 28.0                             | 20.0 | 2000  | 0.8       | FGC3WK563G142GL5 |
| 1600 | 650 | 0.068     | 32         | 18   | 9   | 27.5 | 5.0            | 136.0        | 24.0                             | 20.0 | 2000  | 0.8       | FGC3WK683G152GL5 |
| 1600 | 650 | 0.082     | 32         | 20   | 11  | 27.5 | 5.5            | 164.0        | 20.0                             | 20.0 | 2000  | 0.8       | FGC3WK823G182GL5 |
| 1600 | 650 | 0.1       | 32         | 22   | 13  | 27.5 | 6.0            | 200.0        | 18.0                             | 20.0 | 2000  | 0.8       | FGC3WK104G212GL5 |
| 1600 | 650 | 0.12      | 32         | 22   | 13  | 27.5 | 6.5            | 240.0        | 16.0                             | 20.0 | 2000  | 0.8       | FGC3WK124G212GL5 |
| 1600 | 650 | 0.15      | 32         | 24.5 | 13  | 27.5 | 7.0            | 300.0        | 14.0                             | 20.0 | 2000  | 0.8       | FGC3WK154G222GL5 |
| 1600 | 650 | 0.18      | 32         | 28   | 14  | 27.5 | 7.5            | 360.0        | 12.0                             | 20.0 | 2000  | 0.8       | FGC3WK184G262GL5 |
| 1600 | 650 | 0.22      | 32         | 33   | 18  | 27.5 | 8.5            | 440.0        | 10.0                             | 20.0 | 2000  | 0.8       | FGC3WK224G342GL5 |
| 1600 | 650 | 0.27      | 32         | 33   | 18  | 27.5 | 9.0            | 540.0        | 9.5                              | 20.0 | 2000  | 0.8       | FGC3WK274G342GL5 |
| 1600 | 650 | 0.33      | 32         | 33   | 18  | 27.5 | 10.0           | 660.0        | 8.0                              | 20.0 | 2000  | 0.8       | FGC3WK334G342GL5 |
| 1600 | 650 | 0.39      | 32         | 37   | 22  | 27.5 | 11.0           | 780.0        | 7.0                              | 20.0 | 2000  | 1.0       | FGC3WK394G402GL5 |
| 1600 | 650 | 0.47      | 32         | 37   | 22  | 27.5 | 12.0           | 940.0        | 6.0                              | 20.0 | 2000  | 1.0       | FGC3WK474G402GL5 |
| 1600 | 650 | 0.082     | 42         | 22   | 11  | 37.5 | 4.8            | 98.4         | 28.0                             | 25.0 | 1200  | 1.0       | FGC3WK823K852KL5 |
| 1600 | 650 | 0.1       | 42         | 22   | 11  | 37.5 | 5.0            | 120.0        | 24.0                             | 25.0 | 1200  | 1.0       | FGC3WK104K852KL5 |
| 1600 | 650 | 0.12      | 42         | 22   | 11  | 37.5 | 5.5            | 144.0        | 22.0                             | 25.0 | 1200  | 1.0       | FGC3WK124K852KL5 |
| 1600 | 650 | 0.15      | 42         | 22   | 11  | 37.5 | 5.8            | 180.0        | 20.0                             | 25.0 | 1200  | 1.0       | FGC3WK154K852KL5 |
| 1600 | 650 | 0.18      | 42         | 24   | 13  | 37.5 | 6.0            | 216.0        | 18.0                             | 25.0 | 1200  | 1.0       | FGC3WK184K112KL5 |
| 1600 | 650 | 0.22      | 42         | 24   | 13  | 37.5 | 6.2            | 264.0        | 17.0                             | 25.0 | 1200  | 1.0       | FGC3WK224K112KL5 |
| 1600 | 650 | 0.27      | 42         | 24   | 13  | 37.5 | 6.5            | 324.0        | 15.0                             | 25.0 | 1200  | 1.0       | FGC3WK274K112KL5 |
| 1600 | 650 | 0.33      | 42         | 28.5 | 16  | 37.5 | 6.8            | 396.0        | 14.0                             | 25.0 | 1200  | 1.0       | FGC3WK334K862KL5 |
| 1600 | 650 | 0.39      | 42         | 28.5 | 16  | 37.5 | 7.5            | 468.0        | 12.5                             | 25.0 | 1200  | 1.0       | FGC3WK394K862KL5 |
| 1600 | 650 | 0.47      | 42         | 32   | 19  | 37.5 | 8.0            | 564.0        | 12.0                             | 25.0 | 1200  | 1.0       | FGC3WK474K212KL5 |
| 1600 | 650 | 0.56      | 42         | 40   | 20  | 37.5 | 9.0            | 672.0        | 11.0                             | 25.0 | 1200  | 1.0       | FGC3WK564K242KL5 |
| 1600 | 650 | 0.68      | 42         | 40   | 20  | 37.5 | 9.5            | 816.0        | 10.5                             | 25.0 | 1200  | 1.0       | FGC3WK684K242KL5 |
| 1600 | 650 | 0.82      | 42         | 44   | 24  | 37.5 | 10.5           | 984.0        | 9.0                              | 25.0 | 1200  | 1.0       | FGC3WK824K322KL5 |
| 1600 | 650 | 1         | 42         | 44   | 24  | 37.5 | 12.0           | 1200.0       | 7.5                              | 25.0 | 1200  | 1.0       | FGC3WK105K322KL5 |
| 1600 | 650 | 1.2       | 42         | 45   | 30  | 37.5 | 14.0           | 1440.0       | 6.0                              | 25.0 | 1200  | 1.0       | FGC3WK125K422KL5 |
| 2000 | 700 | 0.001     | 18         | 11   | 5   | 15   | 0.5            | 9.5          | 630.0                            | 12.0 | 9500  | 0.8       | FGC3DK102E142EL5 |
| 2000 | 700 | 0.0012    | 18         | 11   | 5   | 15   | 0.6            | 11.4         | 500.0                            | 12.0 | 9500  | 0.8       | FGC3DK122E142EL5 |
| 2000 | 700 | 0.0015    | 18         | 11   | 5   | 15   | 0.7            | 14.3         | 420.0                            | 12.0 | 9500  | 0.8       | FGC3DK152E142EL5 |

## Rating and Part Number

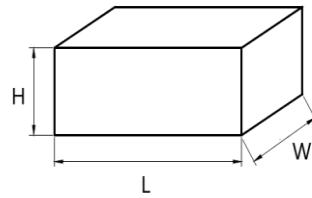
| Vdc  | Vac | Cap Value | Dimensions |      |     |      | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|-----------|------------|------|-----|------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |           | W          | H    | T   | P    |                |              |                                  |      |       |           |                  |
|      |     |           | μF         | mm   | mm  | mm   | 70°C A         | A            | mΩ                               | nH   | V/us  | mm        |                  |
| 2000 | 700 | 0.0018    | 18         | 11   | 5   | 15   | 0.8            | 17.1         | 350.0                            | 12.0 | 9500  | 0.8       | FGC3DK182E142EL5 |
| 2000 | 700 | 0.0022    | 18         | 11   | 5   | 15   | 0.9            | 20.9         | 300.0                            | 12.0 | 9500  | 0.8       | FGC3DK222E142EL5 |
| 2000 | 700 | 0.0027    | 18         | 11   | 5   | 15   | 1.0            | 25.7         | 240.0                            | 12.0 | 9500  | 0.8       | FGC3DK272E142EL5 |
| 2000 | 700 | 0.0033    | 18         | 11   | 5   | 15   | 1.2            | 31.4         | 190.0                            | 12.0 | 9500  | 0.8       | FGC3DK332E142EL5 |
| 2000 | 700 | 0.0039    | 18         | 11   | 5   | 15   | 1.3            | 37.1         | 165.0                            | 12.0 | 9500  | 0.8       | FGC3DK392E142EL5 |
| 2000 | 700 | 0.0047    | 18         | 11   | 5   | 15   | 1.4            | 44.7         | 135.0                            | 12.0 | 9500  | 0.8       | FGC3DK472E142EL5 |
| 2000 | 700 | 0.0056    | 18         | 12   | 6   | 15   | 1.6            | 53.2         | 110.0                            | 12.0 | 9500  | 0.8       | FGC3DK562E172EL5 |
| 2000 | 700 | 0.0068    | 18         | 12   | 6   | 15   | 1.8            | 64.6         | 95.0                             | 12.0 | 9500  | 0.8       | FGC3DK682E172EL5 |
| 2000 | 700 | 0.0082    | 18         | 12   | 6   | 15   | 2.0            | 77.9         | 80.0                             | 12.0 | 9500  | 0.8       | FGC3DK822E172EL5 |
| 2000 | 700 | 0.01      | 18         | 13.5 | 7.5 | 15   | 2.5            | 95.0         | 65.0                             | 12.0 | 9500  | 0.8       | FGC3DK103E292EL5 |
| 2000 | 700 | 0.012     | 18         | 14.5 | 8.5 | 15   | 2.8            | 114.0        | 50.0                             | 12.0 | 9500  | 0.8       | FGC3DK123E342EL5 |
| 2000 | 700 | 0.015     | 18         | 14.5 | 8.5 | 15   | 3.0            | 142.5        | 45.0                             | 12.0 | 9500  | 0.8       | FGC3DK153E342EL5 |
| 2000 | 700 | 0.018     | 18         | 16   | 10  | 15   | 3.8            | 171.0        | 35.0                             | 12.0 | 9500  | 0.8       | FGC3DK183E432EL5 |
| 2000 | 700 | 0.001     | 26         | 15.5 | 6   | 22.5 | 0.6            | 4.5          | 550.0                            | 15.0 | 4500  | 0.8       | FGC3DK102F142FL5 |
| 2000 | 700 | 0.0012    | 26         | 15.5 | 6   | 22.5 | 0.7            | 5.4          | 450.0                            | 15.0 | 4500  | 0.8       | FGC3DK122F142FL5 |
| 2000 | 700 | 0.0015    | 26         | 15.5 | 6   | 22.5 | 0.8            | 6.8          | 360.0                            | 15.0 | 4500  | 0.8       | FGC3DK152F142FL5 |
| 2000 | 700 | 0.0018    | 26         | 15.5 | 6   | 22.5 | 0.9            | 8.1          | 300.0                            | 15.0 | 4500  | 0.8       | FGC3DK182F142FL5 |
| 2000 | 700 | 0.0022    | 26         | 15.5 | 6   | 22.5 | 1.0            | 9.9          | 250.0                            | 15.0 | 4500  | 0.8       | FGC3DK222F142FL5 |
| 2000 | 700 | 0.0027    | 26         | 15.5 | 6   | 22.5 | 1.2            | 12.2         | 230.0                            | 15.0 | 4500  | 0.8       | FGC3DK272F142FL5 |
| 2000 | 700 | 0.0033    | 26         | 15.5 | 6   | 22.5 | 1.2            | 14.9         | 200.0                            | 15.0 | 4500  | 0.8       | FGC3DK332F142FL5 |
| 2000 | 700 | 0.0039    | 26         | 15.5 | 6   | 22.5 | 1.4            | 17.6         | 180.0                            | 15.0 | 4500  | 0.8       | FGC3DK392F142FL5 |
| 2000 | 700 | 0.0047    | 26         | 15.5 | 6   | 22.5 | 1.6            | 21.2         | 140.0                            | 15.0 | 4500  | 0.8       | FGC3DK472F142FL5 |
| 2000 | 700 | 0.0056    | 26         | 15.5 | 6   | 22.5 | 1.8            | 25.2         | 120.0                            | 15.0 | 4500  | 0.8       | FGC3DK562F142FL5 |
| 2000 | 700 | 0.0068    | 26         | 15.5 | 6   | 22.5 | 2.0            | 30.6         | 95.0                             | 15.0 | 4500  | 0.8       | FGC3DK682F142FL5 |
| 2000 | 700 | 0.0082    | 26         | 15.5 | 6   | 22.5 | 2.2            | 36.9         | 75.0                             | 15.0 | 4500  | 0.8       | FGC3DK822F142FL5 |
| 2000 | 700 | 0.01      | 26         | 15.5 | 6   | 22.5 | 2.3            | 45.0         | 65.0                             | 15.0 | 4500  | 0.8       | FGC3DK103F142FL5 |
| 2000 | 700 | 0.012     | 26         | 15.5 | 6   | 22.5 | 2.5            | 54.0         | 60.0                             | 15.0 | 4500  | 0.8       | FGC3DK123F142FL5 |
| 2000 | 700 | 0.015     | 26         | 15.5 | 6   | 22.5 | 2.8            | 67.5         | 45.0                             | 15.0 | 4500  | 0.8       | FGC3DK153F142FL5 |
| 2000 | 700 | 0.018     | 26         | 15.5 | 6   | 22.5 | 3.2            | 81.0         | 35.0                             | 15.0 | 4500  | 0.8       | FGC3DK183F142FL5 |
| 2000 | 700 | 0.022     | 26         | 16.5 | 7   | 22.5 | 4.0            | 99.0         | 26.0                             | 15.0 | 4500  | 0.8       | FGC3DK223F172FL5 |
| 2000 | 700 | 0.027     | 26         | 16.5 | 7   | 22.5 | 4.5            | 121.5        | 20.0                             | 15.0 | 4500  | 0.8       | FGC3DK273F172FL5 |
| 2000 | 700 | 0.033     | 26         | 17   | 8.5 | 22.5 | 5.2            | 148.5        | 18.0                             | 15.0 | 4500  | 0.8       | FGC3DK333F202FL5 |
| 2000 | 700 | 0.039     | 26         | 19   | 10  | 22.5 | 5.8            | 175.5        | 15.0                             | 15.0 | 4500  | 0.8       | FGC3DK393F242FL5 |
| 2000 | 700 | 0.047     | 26         | 19   | 10  | 22.5 | 6.0            | 211.5        | 13.0                             | 15.0 | 4500  | 0.8       | FGC3DK473F242FL5 |
| 2000 | 700 | 0.056     | 26         | 20   | 11  | 22.5 | 6.5            | 252.0        | 12.0                             | 15.0 | 4500  | 0.8       | FGC3DK563F262FL5 |
| 2000 | 700 | 0.022     | 32         | 17   | 8   | 27.5 | 3.0            | 55.0         | 45.0                             | 20.0 | 2500  | 0.8       | FGC3DK223G142GL5 |
| 2000 | 700 | 0.027     | 32         | 17   | 8   | 27.5 | 3.5            | 67.5         | 40.0                             | 20.0 | 2500  | 0.8       | FGC3DK273G142GL5 |
| 2000 | 700 | 0.033     | 32         | 18   | 9   | 27.5 | 4.0            | 82.5         | 35.0                             | 20.0 | 2500  | 0.8       | FGC3DK333G152GL5 |
| 2000 | 700 | 0.039     | 32         | 20   | 11  | 27.5 | 4.5            | 97.5         | 28.0                             | 20.0 | 2500  | 0.8       | FGC3DK393G182GL5 |
| 2000 | 700 | 0.047     | 32         | 20   | 11  | 27.5 | 4.8            | 117.5        | 25.0                             | 20.0 | 2500  | 0.8       | FGC3DK473G182GL5 |
| 2000 | 700 | 0.056     | 32         | 22   | 13  | 27.5 | 5.0            | 140.0        | 24.0                             | 20.0 | 2500  | 0.8       | FGC3DK563G212GL5 |
| 2000 | 700 | 0.068     | 32         | 22   | 13  | 27.5 | 5.5            | 170.0        | 22.0                             | 20.0 | 2500  | 0.8       | FGC3DK683G212GL5 |
| 2000 | 700 | 0.082     | 32         | 24.5 | 13  | 27.5 | 6.0            | 205.0        | 20.0                             | 20.0 | 2500  | 0.8       | FGC3DK823G222GL5 |
| 2000 | 700 | 0.1       | 32         | 28   | 14  | 27.5 | 6.5            | 250.0        | 18.0                             | 20.0 | 2500  | 0.8       | FGC3DK104G262GL5 |
| 2000 | 700 | 0.12      | 32         | 33   | 18  | 27.5 | 7.0            | 300.0        | 16.0                             | 20.0 | 2500  | 0.8       | FGC3DK124G342GL5 |
| 2000 | 700 | 0.15      | 32         | 33   | 18  | 27.5 | 7.5            | 375.0        | 14.0                             | 20.0 | 2500  | 0.8       | FGC3DK154G342GL5 |
| 2000 | 700 | 0.18      | 32         | 37   | 22  | 27.5 | 8.0            | 450.0        | 12.0                             | 20.0 | 2500  | 1.0       | FGC3DK184G402GL5 |
| 2000 | 700 | 0.22      | 32         | 37   | 22  | 27.5 | 8.5            | 550.0        | 10.0                             | 20.0 | 2500  | 1.0       | FGC3DK224G402GL5 |
| 2000 | 700 | 0.033     | 42         | 22   | 11  | 37.5 | 4.0            | 49.5         | 35.0                             | 25.0 | 1500  | 1.0       | FGC3DK333K852KL5 |
| 2000 | 700 | 0.039     | 42         | 22   | 11  | 37.5 | 4.5            | 58.5         | 28.0                             | 25.0 | 1500  | 1.0       | FGC3DK393K852KL5 |
| 2000 | 700 | 0.047     | 42         | 22   | 11  | 37.5 | 4.8            | 70.5         | 26.0                             | 25.0 | 1500  | 1.0       | FGC3DK473K852KL5 |
| 2000 | 700 | 0.056     | 42         | 22   | 11  | 37.5 | 5.0            | 84.0         | 24.0                             | 25.0 | 1500  | 1.0       | FGC3DK563K852KL5 |
| 2000 | 700 | 0.068     | 42         | 22   | 11  | 37.5 | 5.4            | 102.0        | 23.0                             | 25.0 | 1500  | 1.0       | FGC3DK683K852KL5 |
| 2000 | 700 | 0.082     | 42         | 22   | 11  | 37.5 | 5.8            | 123.0        | 22.0                             | 25.0 | 1500  | 1.0       | FGC3DK823K852KL5 |
| 2000 | 700 | 0.1       | 42         | 24   | 13  | 37.5 | 6.5            | 150.0        | 18.0                             | 25.0 | 1500  | 1.0       | FGC3DK104K112KL5 |
| 2000 | 700 | 0.12      | 42         | 24   | 13  | 37.5 | 7.0            | 180.0        | 16.0                             | 25.0 | 1500  | 1.0       | FGC3DK124K112KL5 |

## Rating and Part Number

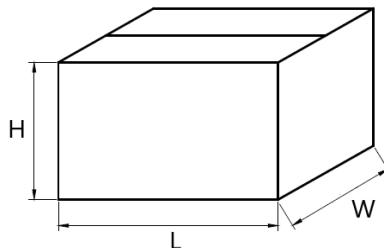
| Vdc  | Vac | Cap Value<br>$\mu\text{F}$ | Dimensions |         |         |         | Irms<br>100KHz | Peak Current | ESR <sub>Typical</sub><br>100KHZ | ESL  | dv/dt | Lead Wire | Part Number      |
|------|-----|----------------------------|------------|---------|---------|---------|----------------|--------------|----------------------------------|------|-------|-----------|------------------|
|      |     |                            | W<br>mm    | H<br>mm | T<br>mm | P<br>mm |                |              |                                  |      |       |           |                  |
| 2000 | 700 | 0.15                       | 42         | 28.5    | 16      | 37.5    | 7.5            | 225.0        | 15.0                             | 25.0 | 1500  | 1.0       | FGC3DK154K862KL5 |
| 2000 | 700 | 0.18                       | 42         | 28.5    | 16      | 37.5    | 8.0            | 270.0        | 14.0                             | 25.0 | 1500  | 1.0       | FGC3DK184K862KL5 |
| 2000 | 700 | 0.22                       | 42         | 32      | 19      | 37.5    | 8.5            | 330.0        | 12.0                             | 25.0 | 1500  | 1.0       | FGC3DK224K212KL5 |
| 2000 | 700 | 0.27                       | 42         | 40      | 20      | 37.5    | 9.0            | 405.0        | 11.0                             | 25.0 | 1500  | 1.0       | FGC3DK274K242KL5 |
| 2000 | 700 | 0.33                       | 42         | 40      | 20      | 37.5    | 9.5            | 495.0        | 10.5                             | 25.0 | 1500  | 1.0       | FGC3DK334K242KL5 |
| 2000 | 700 | 0.39                       | 42         | 44      | 24      | 37.5    | 10.0           | 585.0        | 9.5                              | 25.0 | 1500  | 1.0       | FGC3DK394K322KL5 |
| 2000 | 700 | 0.47                       | 42         | 44      | 24      | 37.5    | 10.5           | 705.0        | 9.0                              | 25.0 | 1500  | 1.0       | FGC3DK474K322KL5 |
| 2000 | 700 | 0.56                       | 42         | 45      | 30      | 37.5    | 12.0           | 840.0        | 7.5                              | 25.0 | 1500  | 1.0       | FGC3DK564K422KL5 |
| 2000 | 700 | 0.68                       | 42         | 45      | 30      | 37.5    | 14.0           | 1020.0       | 6.0                              | 25.0 | 1500  | 1.0       | FGC3DK684K422KL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 10    | C13       | 13        | 11   | 5   | 1,200              | 1,488       | 680       |
|       | C16       | 13        | 12   | 6   | 1,200              | 1,224       | 560       |
|       | C24       | 13        | 13   | 7   | 1,200              | 1,056       | 480       |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F14       | 26        | 15.5 | 6   | 612                | 612         | 350       |
|       | F17       | 26        | 16.5 | 7   | 528                | 528         | 300       |
|       | F20       | 26        | 17   | 8.5 | 432                | 432         | 250       |
|       | F24       | 26        | 19   | 10  | 372                | 372         | 210       |
|       | F26       | 26        | 20   | 11  | 336                | 336         | 190       |
|       | F27       | 26        | 22   | 12  | 300                | 300         | 170       |
| 27.5  | G14       | 32        | 17   | 8   | 380                | 380         |           |
|       | G15       | 32        | 18   | 9   | 340                | 340         |           |
|       | G18       | 32        | 20   | 11  | 280                | 280         |           |
|       | G21       | 32        | 22   | 13  | 230                | 230         |           |
|       | G22       | 32        | 24.5 | 13  | 230                | 230         |           |
|       | G26       | 32        | 28   | 14  | 220                | 220         |           |
|       | G34       | 32        | 33   | 18  | 170                | 170         |           |
|       | G40       | 32        | 37   | 22  | 140                | 140         |           |
| 37.5  | K11       | 42        | 24   | 13  | 161                | 161         |           |
|       | K17       | 42        | 28   | 17  | 126                | 126         |           |
|       | K21       | 42        | 32   | 19  | 112                | 112         |           |
|       | K24       | 42        | 40   | 20  | 105                | 105         |           |
|       | K32       | 42        | 44   | 24  | 91                 | 91          |           |
|       | K42       | 42        | 45   | 30  | 70                 | 70          |           |
|       | K47       | 42        | 50   | 35  | 63                 | 63          |           |
|       | K85       | 42        | 22   | 11  | 196                | 196         |           |
|       | K86       | 42        | 28.5 | 16  | 133                | 133         |           |

## Overview

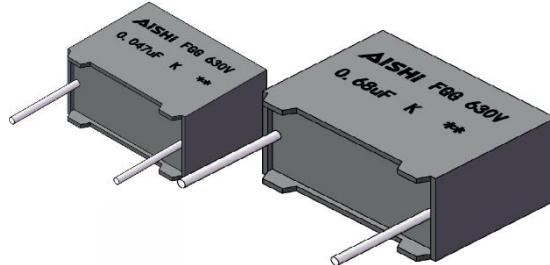
The FGG series is constructed of metallized polyester film encapsulated in plastic cases, sealed with epoxy resin.

## Applications

Widely used in by-passing, blocking, coupling, decoupling, pulse, logic, timing, oscillator circuits, ballasts and compact lamps

## Features

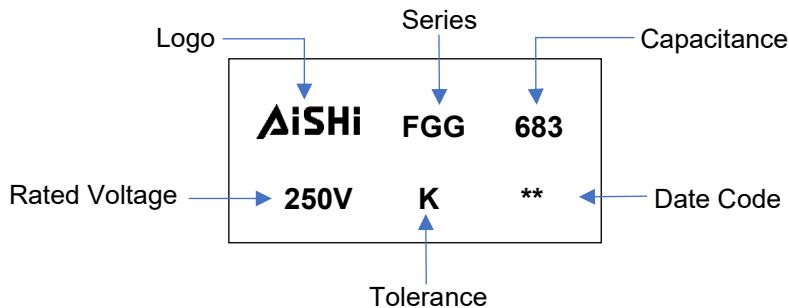
- Self-healing property
- High density packaging
- Good solderability
- High moisture resistance
- High operating temperature 125°C



## General Technical Data

|                             |  |
|-----------------------------|--|
| Dielectric                  | Metallized Polyester Film  |
| Voltage Range               | 100Vdc ~ 630Vdc  |
| Capacitance Range           | 0.001uF ~ 30uF   |
| Capacitance Tolerance       | ±5% or ±10% at +25°C   |
| Operating Temperature Range | -40°C ~ +125°C<br>(85°C ~125°C, decreasing factor 1.25% per °C for Rated Voltage)  |
| Climatic Category           | 40/105/56 IEC 60068-1  |
| Dissipation Factor          | 0.010 (25°C, 1KHz)   |
| Insulation Resistance       | R between leads, for C ≤ 0.33 µF at 100 V; 1 min > 30 000 MΩ<br>RC between leads, for C > 0.33 µF at 100 V; 1 min > 10 000 MΩ*uF |

## Marking



## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Part Number System

| F              | GG                             | 2G                                   | K                   | 105   | F24                      | 2FL                          | 5                               |
|----------------|--------------------------------|--------------------------------------|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series                         | Voltage (VDC)                        | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Lead Length Code                |
| F = Film       | DC Film,<br>Metallized PE Film | 100=1K<br>250=2E<br>400=2G<br>630=2L | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Lead Length Code Table |

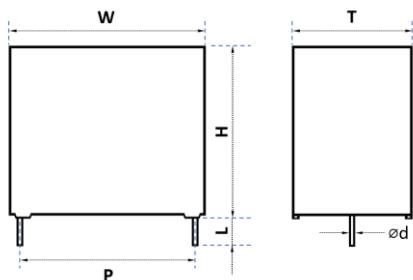
## Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Lead Space) |   | Digit Three<br>(Lead Ipsilateral) |   |
|-----------------------------------|---|---------------------------|---|-----------------------------------|---|
| 2 leads for long                  | L | 10.0mm                    | C | N/A                               | L |
| 2 leads for straight cut          | 2 | 12.5mm                    | D |                                   |   |
| 2 leads for forming cut           | E | 15.0mm                    | E |                                   |   |
| 2 leads for taping forming        | T | 22.5mm                    | F |                                   |   |
| 2 leads for taping straight       | V | 27.5mm                    | G |                                   |   |
|                                   |   |                           |   |                                   |   |
|                                   |   |                           |   |                                   |   |
|                                   |   |                           |   |                                   |   |

## Lead Length Code

| Lead Length |   |
|-------------|---|
| 20mm min    | L |
| 35mm min    | B |
| 3.2mm       | 1 |
| 3.5mm       | 2 |
| 3.0mm       | 3 |
| 4.0mm       | 4 |
| 5.0mm       | 5 |
| 7.0mm       | 7 |
| Taping      | T |
| N/A         | N |

### Dimension (mm)



### Size Code Table (mm)

| Size Code | Dimension |            |      |            |      |            | Pitch |            | Lead Wire |            |
|-----------|-----------|------------|------|------------|------|------------|-------|------------|-----------|------------|
|           | W         | Toleranc e | H    | Toleranc e | T    | Toleranc e | P     | Toleranc e | Ød        | Toleranc e |
| B11       | 10.0      | 0.5        | 9.0  | 0.5        | 4.0  | 0.5        | 7.5   | 0.5        | 0.5       | 0.05       |
| B15       | 10.0      | 0.5        | 11.0 | 0.5        | 5.0  | 0.5        | 7.5   | 0.5        | 0.5       | 0.05       |
| B16       | 10.0      | 0.5        | 12.0 | 0.5        | 6.0  | 0.5        | 7.5   | 0.5        | 0.5       | 0.05       |
| C11       | 13.0      | 0.5        | 9.0  | 0.5        | 4.0  | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| C13       | 13.0      | 0.5        | 11.0 | 0.5        | 5.0  | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| C16       | 13.0      | 0.5        | 12.0 | 0.5        | 6.0  | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| C24       | 13.0      | 0.5        | 13.0 | 0.5        | 7.0  | 0.5        | 10.0  | 0.5        | 0.6       | 0.05       |
| E14       | 18.0      | 0.5        | 11.0 | 0.5        | 5.0  | 0.5        | 15.0  | 0.5        | 0.6       | 0.05       |
| E17       | 18.0      | 0.5        | 12.0 | 0.5        | 6.0  | 0.5        | 15.0  | 0.5        | 0.6       | 0.05       |
| E29       | 18.0      | 0.5        | 13.5 | 0.5        | 7.5  | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E34       | 18.0      | 0.5        | 14.5 | 0.5        | 8.5  | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E43       | 18.0      | 0.5        | 16.0 | 0.5        | 10.0 | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| E47       | 18.0      | 0.5        | 19.0 | 0.5        | 11.0 | 0.5        | 15.0  | 0.5        | 0.8       | 0.05       |
| F17       | 26.0      | 0.5        | 16.5 | 0.5        | 7.0  | 0.5        | 22.5  | 0.5        | 0.8       | 0.05       |
| F20       | 26.0      | 0.5        | 17.0 | 0.5        | 8.5  | 0.5        | 22.5  | 0.5        | 0.8       | 0.05       |
| F24       | 26.0      | 0.5        | 19.0 | 0.5        | 10.0 | 0.5        | 22.5  | 0.5        | 0.8       | 0.05       |
| F26       | 26.0      | 0.5        | 20.0 | 0.5        | 11.0 | 0.5        | 22.5  | 0.5        | 0.8       | 0.05       |
| F27       | 26.0      | 0.5        | 22.0 | 0.5        | 12.0 | 0.5        | 22.5  | 0.5        | 0.8       | 0.05       |
| G15       | 32.0      | 0.8        | 18.0 | 0.8        | 9.0  | 0.8        | 27.5  | 0.5        | 0.8       | 0.05       |
| G18       | 32.0      | 0.8        | 20.0 | 0.8        | 11.0 | 0.8        | 27.5  | 0.5        | 0.8       | 0.05       |
| G21       | 32.0      | 0.8        | 22.0 | 0.8        | 13.0 | 0.8        | 27.5  | 0.5        | 0.8       | 0.05       |
| G30       | 32.0      | 0.8        | 25.0 | 0.8        | 16.0 | 0.8        | 27.5  | 0.5        | 0.8       | 0.05       |
| G31       | 32.0      | 0.8        | 28.0 | 0.8        | 16.0 | 0.8        | 27.5  | 0.5        | 0.8       | 0.05       |
| G33       | 32.0      | 0.8        | 28.0 | 0.8        | 18.0 | 0.8        | 27.5  | 0.5        | 0.8       | 0.05       |
| G34       | 32.0      | 0.8        | 33.0 | 0.8        | 18.0 | 0.8        | 27.5  | 0.5        | 0.8       | 0.05       |

### Rating and Part Number

| Vdc | Vac | Cap Value | Dimensions |         |         |         | Peak Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|---------|---------|---------|--------------|-------|-----------|------------------|
|     |     |           | W<br>μF    | H<br>mm | T<br>mm | P<br>mm |              |       |           |                  |
| 100 | 50  | 0.1       | 10.0       | 9.0     | 4.0     | 7.5     | 3.5          | 35    | 0.5       | FGG1KK104B112BL5 |
| 100 | 50  | 0.1       | 13.0       | 9.0     | 4.0     | 10.0    | 3.0          | 30    | 0.6       | FGG1KK104C112CL5 |
| 100 | 50  | 0.12      | 10.0       | 9.0     | 4.0     | 7.5     | 4.2          | 35    | 0.5       | FGG1KK124B112BL5 |
| 100 | 50  | 0.12      | 13.0       | 9.0     | 4.0     | 10.0    | 3.6          | 30    | 0.6       | FGG1KK124C112CL5 |
| 100 | 50  | 0.15      | 10.0       | 9.0     | 4.0     | 7.5     | 5.3          | 35    | 0.5       | FGG1KK154B112BL5 |
| 100 | 50  | 0.15      | 13.0       | 9.0     | 4.0     | 10.0    | 4.5          | 30    | 0.6       | FGG1KK154C112CL5 |
| 100 | 50  | 0.18      | 10.0       | 9.0     | 4.0     | 7.5     | 6.3          | 35    | 0.5       | FGG1KK184B112BL5 |
| 100 | 50  | 0.18      | 13.0       | 9.0     | 4.0     | 10.0    | 5.4          | 30    | 0.6       | FGG1KK184C112CL5 |
| 100 | 50  | 0.22      | 10.0       | 9.0     | 4.0     | 7.5     | 7.7          | 35    | 0.5       | FGG1KK224B112BL5 |
| 100 | 50  | 0.22      | 13.0       | 9.0     | 4.0     | 10.0    | 6.6          | 30    | 0.6       | FGG1KK224C112CL5 |
| 100 | 50  | 0.33      | 10.0       | 9.0     | 4.0     | 7.5     | 11.6         | 35    | 0.5       | FGG1KK334B112BL5 |
| 100 | 50  | 0.33      | 13.0       | 9.0     | 4.0     | 10.0    | 9.9          | 30    | 0.6       | FGG1KK334C112CL5 |
| 100 | 50  | 0.47      | 10.0       | 9.0     | 4.0     | 7.5     | 16.5         | 35    | 0.5       | FGG1KK474B112BL5 |
| 100 | 50  | 0.47      | 13.0       | 9.0     | 4.0     | 10.0    | 14.1         | 30    | 0.6       | FGG1KK474C112CL5 |
| 100 | 50  | 0.56      | 10.0       | 11.0    | 5.0     | 7.5     | 19.6         | 35    | 0.5       | FGG1KK564B152BL5 |
| 100 | 50  | 0.56      | 13.0       | 9.0     | 4.0     | 10.0    | 16.8         | 30    | 0.6       | FGG1KK564C112CL5 |
| 100 | 50  | 0.68      | 10.0       | 11.0    | 5.0     | 7.5     | 23.8         | 35    | 0.5       | FGG1KK684B152BL5 |
| 100 | 50  | 0.68      | 13.0       | 9.0     | 4.0     | 10.0    | 20.4         | 30    | 0.6       | FGG1KK684C112CL5 |
| 100 | 50  | 0.82      | 10.0       | 12.0    | 6.0     | 7.5     | 28.7         | 35    | 0.5       | FGG1KK824B162BL5 |
| 100 | 50  | 0.82      | 13.0       | 11.0    | 5.0     | 10.0    | 24.6         | 30    | 0.6       | FGG1KK824C132CL5 |
| 100 | 50  | 1.0       | 10.0       | 12.0    | 6.0     | 7.5     | 35.0         | 35    | 0.5       | FGG1KK105B162BL5 |
| 100 | 50  | 1.0       | 13.0       | 11.0    | 5.0     | 10.0    | 30.0         | 30    | 0.6       | FGG1KK105C132CL5 |
| 100 | 50  | 1.2       | 13.0       | 12.0    | 6.0     | 10.0    | 36.0         | 30    | 0.6       | FGG1KK125C162CL5 |
| 100 | 50  | 1.5       | 13.0       | 12.0    | 6.0     | 10.0    | 45.0         | 30    | 0.6       | FGG1KK155C162CL5 |
| 100 | 50  | 1.8       | 13.0       | 13.0    | 7.0     | 10.0    | 54.0         | 30    | 0.6       | FGG1KK185C242CL5 |
| 100 | 50  | 2.2       | 18.0       | 12.0    | 6.0     | 15.0    | 44.0         | 20    | 0.6       | FGG1KK225E172EL5 |
| 100 | 50  | 3.3       | 18.0       | 13.5    | 7.5     | 15.0    | 66.0         | 20    | 0.8       | FGG1KK335E292EL5 |
| 100 | 50  | 4.7       | 18.0       | 14.5    | 8.5     | 15.0    | 94.0         | 20    | 0.8       | FGG1KK475E342EL5 |
| 100 | 50  | 4.7       | 26.0       | 16.5    | 7.0     | 22.5    | 47.0         | 10    | 0.8       | FGG1KK475F172FL5 |
| 100 | 50  | 6.8       | 26.0       | 19.0    | 10.0    | 22.5    | 68.0         | 10    | 0.8       | FGG1KK685F242FL5 |
| 100 | 50  | 8.2       | 26.0       | 20.0    | 11.0    | 22.5    | 82.0         | 10    | 0.8       | FGG1KK825F262FL5 |
| 100 | 50  | 10        | 26.0       | 22.0    | 12.0    | 22.5    | 100.0        | 10    | 0.8       | FGG1KK106F272FL5 |
| 100 | 50  | 10        | 32.0       | 20.0    | 11.0    | 27.5    | 50.0         | 5     | 0.8       | FGG1KK106G182GL5 |
| 100 | 50  | 12        | 32.0       | 20.0    | 11.0    | 27.5    | 60.0         | 5     | 0.8       | FGG1KK126G182GL5 |
| 100 | 50  | 15        | 32.0       | 22.0    | 13.0    | 27.5    | 75.0         | 5     | 0.8       | FGG1KK156G212GL5 |
| 100 | 50  | 22        | 32.0       | 25.0    | 16.0    | 27.5    | 110.0        | 5     | 0.8       | FGG1KK226G302GL5 |
| 100 | 50  | 30        | 32.0       | 28.0    | 18.0    | 27.5    | 150.0        | 5     | 0.8       | FGG1KK306G332GL5 |
| 250 | 160 | 0.033     | 10.0       | 9.0     | 4.0     | 7.5     | 3.6          | 110   | 0.5       | FGG2EK333B112BL5 |
| 250 | 160 | 0.033     | 13.0       | 9.0     | 4.0     | 10.0    | 2.6          | 80    | 0.6       | FGG2EK333C112CL5 |
| 250 | 160 | 0.047     | 10.0       | 9.0     | 4.0     | 7.5     | 5.2          | 110   | 0.5       | FGG2EK473B112BL5 |
| 250 | 160 | 0.047     | 13.0       | 9.0     | 4.0     | 10.0    | 3.8          | 80    | 0.6       | FGG2EK473C112CL5 |
| 250 | 160 | 0.056     | 10.0       | 9.0     | 4.0     | 7.5     | 6.2          | 110   | 0.5       | FGG2EK563B112BL5 |
| 250 | 160 | 0.056     | 13.0       | 9.0     | 4.0     | 10.0    | 4.5          | 80    | 0.6       | FGG2EK563C112CL5 |
| 250 | 160 | 0.068     | 10.0       | 9.0     | 4.0     | 7.5     | 7.5          | 110   | 0.5       | FGG2EK683B112BL5 |
| 250 | 160 | 0.068     | 13.0       | 9.0     | 4.0     | 10.0    | 5.4          | 80    | 0.6       | FGG2EK683C112CL5 |
| 250 | 160 | 0.082     | 10.0       | 9.0     | 4.0     | 7.5     | 9.0          | 110   | 0.5       | FGG2EK823B112BL5 |
| 250 | 160 | 0.082     | 13.0       | 9.0     | 4.0     | 10.0    | 6.6          | 80    | 0.6       | FGG2EK823C112CL5 |
| 250 | 160 | 0.1       | 10.0       | 9.0     | 4.0     | 7.5     | 11.0         | 110   | 0.5       | FGG2EK104B112BL5 |

# Metalized Polyester Film Capacitors

## FGG Series - 100 ~ 630VDC

### Rating and Part Number

| Vdc | Vac | Cap Value | Dimensions |      |      |      | Peak Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|------|------|------|--------------|-------|-----------|------------------|
|     |     |           | W          | H    | T    | P    |              |       |           |                  |
|     |     | µF        | mm         | mm   | mm   | mm   | A            | V/us  | mm        |                  |
| 250 | 160 | 0.1       | 13.0       | 9.0  | 4.0  | 10.0 | 8.0          | 80    | 0.6       | FGG2EK104C112CL5 |
| 250 | 160 | 0.12      | 10.0       | 9.0  | 4.0  | 7.5  | 13.2         | 110   | 0.5       | FGG2EK124B112BL5 |
| 250 | 160 | 0.12      | 13.0       | 9.0  | 4.0  | 10.0 | 9.6          | 80    | 0.6       | FGG2EK124C112CL5 |
| 250 | 160 | 0.15      | 10.0       | 9.0  | 4.0  | 7.5  | 16.5         | 110   | 0.5       | FGG2EK154B112BL5 |
| 250 | 160 | 0.15      | 13.0       | 9.0  | 4.0  | 10.0 | 12.0         | 80    | 0.6       | FGG2EK154C112CL5 |
| 250 | 160 | 0.18      | 10.0       | 11.0 | 5.0  | 7.5  | 19.8         | 110   | 0.5       | FGG2EK184B152BL5 |
| 250 | 160 | 0.18      | 13.0       | 11.0 | 5.0  | 10.0 | 14.4         | 80    | 0.6       | FGG2EK184C132CL5 |
| 250 | 160 | 0.22      | 10.0       | 11.0 | 5.0  | 7.5  | 24.2         | 110   | 0.5       | FGG2EK224B152BL5 |
| 250 | 160 | 0.22      | 13.0       | 11.0 | 5.0  | 10.0 | 17.6         | 80    | 0.6       | FGG2EK224C132CL5 |
| 250 | 160 | 0.33      | 10.0       | 12.0 | 6.0  | 7.5  | 36.3         | 110   | 0.5       | FGG2EK334B162BL5 |
| 250 | 160 | 0.33      | 13.0       | 11.0 | 5.0  | 10.0 | 26.4         | 80    | 0.6       | FGG2EK334C132CL5 |
| 250 | 160 | 0.39      | 13.0       | 12.0 | 6.0  | 10.0 | 31.2         | 80    | 0.6       | FGG2EK394C162CL5 |
| 250 | 160 | 0.47      | 13.0       | 12.0 | 6.0  | 10.0 | 37.6         | 80    | 0.6       | FGG2EK474C162CL5 |
| 250 | 160 | 0.47      | 18.0       | 11.0 | 5.0  | 15.0 | 21.2         | 45    | 0.6       | FGG2EK474E142EL5 |
| 250 | 160 | 0.68      | 18.0       | 12.0 | 6.0  | 15.0 | 30.6         | 45    | 0.6       | FGG2EK684E172EL5 |
| 250 | 160 | 1.0       | 18.0       | 13.5 | 7.5  | 15.0 | 45.0         | 45    | 0.8       | FGG2EK105E292EL5 |
| 250 | 160 | 1.2       | 18.0       | 13.5 | 7.5  | 15.0 | 54.0         | 45    | 0.8       | FGG2EK125E292EL5 |
| 250 | 160 | 1.5       | 18.0       | 14.5 | 8.5  | 15.0 | 67.5         | 45    | 0.8       | FGG2EK155E342EL5 |
| 250 | 160 | 1.5       | 26.0       | 16.5 | 7.0  | 22.5 | 30.0         | 20    | 0.8       | FGG2EK155F172FL5 |
| 250 | 160 | 1.8       | 26.0       | 16.5 | 7.0  | 22.5 | 36.0         | 20    | 0.8       | FGG2EK185F172FL5 |
| 250 | 160 | 2.2       | 26.0       | 17.0 | 8.5  | 22.5 | 44.0         | 20    | 0.8       | FGG2EK225F202FL5 |
| 250 | 160 | 3.3       | 26.0       | 20.0 | 11.0 | 22.5 | 66.0         | 20    | 0.8       | FGG2EK335F262FL5 |
| 250 | 160 | 3.3       | 32.0       | 18.0 | 9.0  | 27.5 | 49.5         | 15    | 0.8       | FGG2EK335G152GL5 |
| 250 | 160 | 4.7       | 32.0       | 20.0 | 11.0 | 27.5 | 70.5         | 15    | 0.8       | FGG2EK475G182GL5 |
| 250 | 160 | 6.8       | 32.0       | 22.0 | 13.0 | 27.5 | 102.0        | 15    | 0.8       | FGG2EK685G212GL5 |
| 250 | 160 | 10        | 32.0       | 25.0 | 16.0 | 27.5 | 150.0        | 15    | 0.8       | FGG2EK106G302GL5 |
| 400 | 220 | 0.01      | 10.0       | 9.0  | 4.0  | 7.5  | 1.8          | 180   | 0.5       | FGG2GK103B112BL5 |
| 400 | 220 | 0.01      | 13.0       | 9.0  | 4.0  | 10.0 | 1.5          | 150   | 0.6       | FGG2GK103C112CL5 |
| 400 | 220 | 0.015     | 10.0       | 9.0  | 4.0  | 7.5  | 2.7          | 180   | 0.5       | FGG2GK153B112BL5 |
| 400 | 220 | 0.015     | 13.0       | 9.0  | 4.0  | 10.0 | 2.3          | 150   | 0.6       | FGG2GK153C112CL5 |
| 400 | 220 | 0.022     | 10.0       | 9.0  | 4.0  | 7.5  | 4.0          | 180   | 0.5       | FGG2GK223B112BL5 |
| 400 | 220 | 0.022     | 13.0       | 9.0  | 4.0  | 10.0 | 3.3          | 150   | 0.6       | FGG2GK223C112CL5 |
| 400 | 220 | 0.033     | 10.0       | 9.0  | 4.0  | 7.5  | 5.9          | 180   | 0.5       | FGG2GK333B112BL5 |
| 400 | 220 | 0.033     | 13.0       | 9.0  | 4.0  | 10.0 | 5.0          | 150   | 0.6       | FGG2GK333C112CL5 |
| 400 | 220 | 0.047     | 10.0       | 9.0  | 4.0  | 7.5  | 8.5          | 180   | 0.5       | FGG2GK473B112BL5 |
| 400 | 220 | 0.047     | 13.0       | 9.0  | 4.0  | 10.0 | 7.1          | 150   | 0.6       | FGG2GK473C112CL5 |
| 400 | 220 | 0.056     | 10.0       | 11.0 | 5.0  | 7.5  | 10.1         | 180   | 0.5       | FGG2GK563B152BL5 |
| 400 | 220 | 0.056     | 13.0       | 9.0  | 4.0  | 10.0 | 8.4          | 150   | 0.6       | FGG2GK563C112CL5 |
| 400 | 220 | 0.068     | 10.0       | 11.0 | 5.0  | 7.5  | 12.2         | 180   | 0.5       | FGG2GK683B152BL5 |
| 400 | 220 | 0.068     | 13.0       | 11.0 | 5.0  | 10.0 | 10.2         | 150   | 0.6       | FGG2GK683C132CL5 |
| 400 | 220 | 0.082     | 10.0       | 12.0 | 6.0  | 7.5  | 14.8         | 180   | 0.5       | FGG2GK823B162BL5 |
| 400 | 220 | 0.082     | 13.0       | 11.0 | 5.0  | 10.0 | 12.3         | 150   | 0.6       | FGG2GK823C132CL5 |
| 400 | 220 | 0.1       | 10.0       | 12.0 | 6.0  | 7.5  | 18.0         | 180   | 0.5       | FGG2GK104B162BL5 |
| 400 | 220 | 0.1       | 13.0       | 11.0 | 5.0  | 10.0 | 15.0         | 150   | 0.6       | FGG2GK104C132CL5 |
| 400 | 220 | 0.12      | 13.0       | 12.0 | 6.0  | 10.0 | 18.0         | 150   | 0.6       | FGG2GK124C162CL5 |
| 400 | 220 | 0.15      | 13.0       | 12.0 | 6.0  | 10.0 | 22.5         | 150   | 0.6       | FGG2GK154C162CL5 |
| 400 | 220 | 0.15      | 18.0       | 11.0 | 5.0  | 15.0 | 9.8          | 65    | 0.6       | FGG2GK154E142EL5 |
| 400 | 220 | 0.18      | 18.0       | 12.0 | 6.0  | 15.0 | 11.7         | 65    | 0.6       | FGG2GK184E172EL5 |

### Rating and Part Number

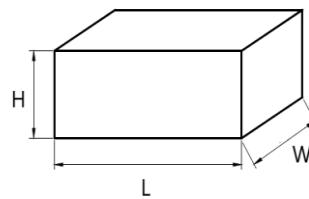
| Vdc | Vac | Cap Value | Dimensions |      |      |      | Peak Current | dv/dt | Lead Wire | Part Number      |
|-----|-----|-----------|------------|------|------|------|--------------|-------|-----------|------------------|
|     |     |           | W          | H    | T    | P    |              |       |           |                  |
|     |     | μF        | mm         | mm   | mm   | mm   | A            | V/us  | mm        |                  |
| 400 | 220 | 0.22      | 18.0       | 12.0 | 6.0  | 15.0 | 14.3         | 65    | 0.6       | FGG2GK224E172EL5 |
| 400 | 220 | 0.33      | 18.0       | 13.5 | 7.5  | 15.0 | 21.5         | 65    | 0.8       | FGG2GK334E292EL5 |
| 400 | 220 | 0.47      | 18.0       | 14.5 | 8.5  | 15.0 | 30.6         | 65    | 0.8       | FGG2GK474E342EL5 |
| 400 | 220 | 0.56      | 18.0       | 16.0 | 10.0 | 15.0 | 36.4         | 65    | 0.8       | FGG2GK564E432EL5 |
| 400 | 220 | 0.68      | 18.0       | 19.0 | 11.0 | 15.0 | 44.2         | 65    | 0.8       | FGG2GK684E472EL5 |
| 400 | 220 | 0.68      | 26.0       | 16.5 | 7.0  | 22.5 | 20.4         | 30    | 0.8       | FGG2GK684F172FL5 |
| 400 | 220 | 0.82      | 26.0       | 17.0 | 8.5  | 22.5 | 24.6         | 30    | 0.8       | FGG2GK824F202FL5 |
| 400 | 220 | 1.0       | 26.0       | 19.0 | 10.0 | 22.5 | 30.0         | 30    | 0.8       | FGG2GK105F242FL5 |
| 400 | 220 | 1.5       | 26.0       | 22.0 | 12.0 | 22.5 | 45.0         | 30    | 0.8       | FGG2GK155F272FL5 |
| 400 | 220 | 1.5       | 32.0       | 20.0 | 11.0 | 27.5 | 37.5         | 25    | 0.8       | FGG2GK155G182GL5 |
| 400 | 220 | 1.8       | 32.0       | 20.0 | 11.0 | 27.5 | 45.0         | 25    | 0.8       | FGG2GK155G182GL5 |
| 400 | 220 | 2.2       | 32.0       | 22.0 | 13.0 | 27.5 | 55.0         | 25    | 0.8       | FGG2GK225G212GL5 |
| 400 | 220 | 3.3       | 32.0       | 25.0 | 16.0 | 27.5 | 82.5         | 25    | 0.8       | FGG2GK335G302GL5 |
| 400 | 220 | 4.7       | 32.0       | 28.0 | 16.0 | 27.5 | 117.5        | 25    | 0.8       | FGG2GK475G312GL5 |
| 400 | 220 | 6.8       | 32.0       | 33.0 | 18.0 | 27.5 | 170.0        | 25    | 0.8       | FGG2GK685G342GL5 |
| 630 | 250 | 0.001     | 10.0       | 9.0  | 4.0  | 7.5  | 0.3          | 250   | 0.5       | FGG2LK102B112BL5 |
| 630 | 250 | 0.001     | 13.0       | 9.0  | 4.0  | 10.0 | 0.2          | 200   | 0.6       | FGG2LK102C112CL5 |
| 630 | 250 | 0.0015    | 10.0       | 9.0  | 4.0  | 7.5  | 0.4          | 250   | 0.5       | FGG2LK152B112BL5 |
| 630 | 250 | 0.0015    | 13.0       | 9.0  | 4.0  | 10.0 | 0.3          | 200   | 0.6       | FGG2LK152C112CL5 |
| 630 | 250 | 0.0022    | 10.0       | 9.0  | 4.0  | 7.5  | 0.6          | 250   | 0.5       | FGG2LK222B112BL5 |
| 630 | 250 | 0.0022    | 13.0       | 9.0  | 4.0  | 10.0 | 0.4          | 200   | 0.6       | FGG2LK222C112CL5 |
| 630 | 250 | 0.0033    | 10.0       | 9.0  | 4.0  | 7.5  | 0.8          | 250   | 0.5       | FGG2LK332B112BL5 |
| 630 | 250 | 0.0033    | 13.0       | 9.0  | 4.0  | 10.0 | 0.7          | 200   | 0.6       | FGG2LK332C112CL5 |
| 630 | 250 | 0.0047    | 10.0       | 9.0  | 4.0  | 7.5  | 1.2          | 250   | 0.5       | FGG2LK472B112BL5 |
| 630 | 250 | 0.0047    | 13.0       | 9.0  | 4.0  | 10.0 | 0.9          | 200   | 0.6       | FGG2LK472C112CL5 |
| 630 | 250 | 0.0068    | 10.0       | 9.0  | 4.0  | 7.5  | 1.7          | 250   | 0.5       | FGG2LK682B112BL5 |
| 630 | 250 | 0.0068    | 13.0       | 9.0  | 4.0  | 10.0 | 1.4          | 200   | 0.6       | FGG2LK682C112CL5 |
| 630 | 250 | 0.0082    | 10.0       | 9.0  | 4.0  | 7.5  | 2.1          | 250   | 0.5       | FGG2LK822B112BL5 |
| 630 | 250 | 0.0082    | 13.0       | 9.0  | 4.0  | 10.0 | 1.6          | 200   | 0.6       | FGG2LK822C112CL5 |
| 630 | 250 | 0.01      | 10.0       | 9.0  | 4.0  | 7.5  | 2.5          | 250   | 0.5       | FGG2LK103B112BL5 |
| 630 | 250 | 0.01      | 13.0       | 9.0  | 4.0  | 10.0 | 2.0          | 200   | 0.6       | FGG2LK103C112CL5 |
| 630 | 250 | 0.015     | 10.0       | 9.0  | 4.0  | 7.5  | 3.8          | 250   | 0.5       | FGG2LK153B112BL5 |
| 630 | 250 | 0.015     | 13.0       | 9.0  | 4.0  | 10.0 | 3.0          | 200   | 0.6       | FGG2LK153C112CL5 |
| 630 | 250 | 0.022     | 10.0       | 11.0 | 5.0  | 7.5  | 5.5          | 250   | 0.5       | FGG2LK223B152BL5 |
| 630 | 250 | 0.022     | 13.0       | 9.0  | 4.0  | 10.0 | 4.4          | 200   | 0.6       | FGG2LK223C112CL5 |
| 630 | 250 | 0.033     | 10.0       | 12.0 | 6.0  | 7.5  | 8.3          | 250   | 0.5       | FGG2LK333B162BL5 |
| 630 | 250 | 0.033     | 13.0       | 11.0 | 5.0  | 10.0 | 6.6          | 200   | 0.6       | FGG2LK333C132CL5 |
| 630 | 250 | 0.039     | 10.0       | 12.0 | 6.0  | 7.5  | 9.8          | 250   | 0.5       | FGG2LK393B162BL5 |
| 630 | 250 | 0.039     | 13.0       | 11.0 | 5.0  | 10.0 | 7.8          | 200   | 0.6       | FGG2LK393C132CL5 |
| 630 | 250 | 0.047     | 10.0       | 12.0 | 6.0  | 7.5  | 11.8         | 250   | 0.5       | FGG2LK473B162BL5 |
| 630 | 250 | 0.047     | 13.0       | 11.0 | 5.0  | 10.0 | 9.4          | 200   | 0.6       | FGG2LK473C132CL5 |
| 630 | 250 | 0.068     | 13.0       | 12.0 | 6.0  | 10.0 | 13.6         | 200   | 0.6       | FGG2LK683C162CL5 |
| 630 | 250 | 0.082     | 18.0       | 11.0 | 5.0  | 15.0 | 7.4          | 90    | 0.6       | FGG2LK823E142EL5 |
| 630 | 250 | 0.1       | 18.0       | 12.0 | 6.0  | 15.0 | 9.0          | 90    | 0.6       | FGG2LK104E172EL5 |
| 630 | 250 | 0.15      | 18.0       | 13.5 | 7.5  | 15.0 | 13.5         | 90    | 0.8       | FGG2LK154E292EL5 |
| 630 | 250 | 0.18      | 18.0       | 14.5 | 8.5  | 15.0 | 16.2         | 90    | 0.8       | FGG2LK184E342EL5 |
| 630 | 250 | 0.22      | 18.0       | 16.0 | 10.0 | 15.0 | 19.8         | 90    | 0.8       | FGG2LK224E432EL5 |
| 630 | 250 | 0.33      | 18.0       | 19.0 | 11.0 | 15.0 | 29.7         | 90    | 0.8       | FGG2LK334E472EL5 |

### Rating and Part Number

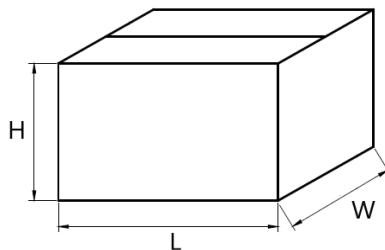
| Vdc | Vac | Cap Value<br>μF | Dimensions |         |         |         | Peak Current<br>A | dv/dt<br>V/us | Lead Wire<br>mm | Part Number      |
|-----|-----|-----------------|------------|---------|---------|---------|-------------------|---------------|-----------------|------------------|
|     |     |                 | W<br>mm    | H<br>mm | T<br>mm | P<br>mm |                   |               |                 |                  |
| 630 | 250 | 0.47            | 26.0       | 17.0    | 8.5     | 22.5    | 16.5              | 35            | 0.8             | FGG2LK474F202FL5 |
| 630 | 250 | 0.56            | 26.0       | 19.0    | 10.0    | 22.5    | 19.6              | 35            | 0.8             | FGG2LK564F242FL5 |
| 630 | 250 | 0.68            | 26.0       | 22.0    | 12.0    | 22.5    | 23.8              | 35            | 0.8             | FGG2LK684F272FL5 |
| 630 | 250 | 0.82            | 32.0       | 20.0    | 11.0    | 27.5    | 28.7              | 35            | 0.8             | FGG2LK824G182FL5 |
| 630 | 250 | 1.0             | 32.0       | 22.0    | 13.0    | 27.5    | 35.0              | 35            | 0.8             | FGG2LK105G212FL5 |

### Packaging Information

| Inner Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±3mm | W±3mm | H ±3mm |
| # 1                                   | 331    | 331   | 35     |
| # 2                                   | 331    | 331   | 60     |
| # 3                                   | 331    | 331   | 80     |
| # 4                                   | 350    | 170   | 35     |
| # 5                                   | 350    | 170   | 60     |
| # 6                                   | 350    | 170   | 80     |



| Outer Box Specifications (Dimensions) |        |       |        |
|---------------------------------------|--------|-------|--------|
| Box #                                 | L ±5mm | W±5mm | H ±5mm |
| # 1                                   | 350    | 340   | 265    |
| # 2                                   | 370    | 360   | 350    |



### Packaging Quantity

| Pitch | Size Code | Dimension |      |     | Packaging Quantity |             |           |
|-------|-----------|-----------|------|-----|--------------------|-------------|-----------|
|       |           | W         | H    | T   | Long Leads         | Short Leads | Ammo Pack |
| 7.5   | B11       | 10        | 9    | 4   | 1,600              | 2,387       | 1,920     |
|       | B15       | 10        | 11   | 5   | 1,600              | 1,922       | 1,550     |
|       | B16       | 10        | 12   | 6   | 1,600              | 1,581       | 1,270     |
| 10    | C11       | 13        | 9    | 4   | 1,200              | 1,848       | 840       |
|       | C13       | 13        | 11   | 5   | 1,200              | 1,488       | 680       |
|       | C16       | 13        | 12   | 6   | 1,200              | 1,224       | 560       |
|       | C24       | 13        | 13   | 7   | 1,200              | 1,056       | 480       |
| 15    | E14       | 18        | 11   | 5   | 800                | 1,054       | 680       |
|       | E17       | 18        | 12   | 6   | 800                | 867         | 560       |
|       | E29       | 18        | 13.5 | 7.5 | 800                | 697         | 450       |
|       | E34       | 18        | 14.5 | 8.5 | 600                | 612         | 390       |
|       | E43       | 18        | 16   | 10  | 600                | 527         | 340       |
|       | E47       | 18        | 19   | 11  | 600                | 476         | 300       |
| 22.5  | F17       | 26        | 16.5 | 7   | 528                | 300         |           |
|       | F20       | 26        | 17   | 8.5 | 432                | 250         |           |
|       | F24       | 26        | 19   | 10  | 372                | 210         |           |
|       | F26       | 26        | 20   | 11  | 336                | 190         |           |
|       | F27       | 26        | 22   | 12  | 300                | 170         |           |
| 27.5  | G15       | 32        | 18   | 9   | 340                | 230         |           |
|       | G18       | 32        | 20   | 11  | 280                | 190         |           |
|       | G21       | 32        | 22   | 13  | 230                | 160         |           |
|       | G30       | 32        | 25   | 16  | 190                | 130         |           |
|       | G31       | 32        | 28   | 16  | 190                | 130         |           |
|       | G33       | 32        | 28   | 18  | 170                | 110         |           |
|       | G34       | 32        | 33   | 18  | 170                | 110         |           |

# Metalized Polypropylene AC Motor Capacitors

## FAE Series - Aluminum Can

### Overview

The FAE series capacitors are designed for motor run system, consist of metallized polypropylene film, enclosed in cylindrical Al case filled with castor oil, fast-on terminals.

### Features

- Self-healing property
- Overpressure disconnector device
- 10K AFC protected
- Fast-on terminals 6.3\*0.8mm
- High reliability
- Motor run capacitor

### Applications

Widely used in home appliance in the following applications, refrigerators, freezers, electrical compressors, washers and air conditioners.



### Applicable Standard

| Approval  | Specification | File Number |
|---|---------------|-------------|
|  | Components    | E500536     |

### General Technical Data

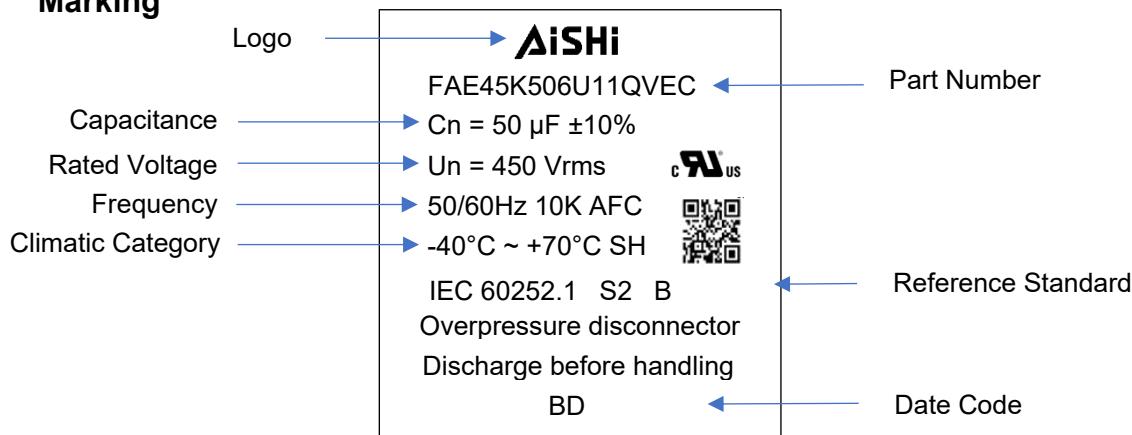
|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film             |
| Voltage Range               | 230Vac ~ 450Vac                           |
| Capacitance Range           | 2.0μF ~ 100μF                             |
| Capacitance Tolerance       | ±5% or ±10% at +25°C                      |
| Operating Temperature Range | -40°C ~ +85°C                             |
| Climatic Category           | 40/85/56 IEC60068-1                       |
| Dissipation Factor          | ≤0.0010 at 100Hz                          |
| Insulation Resistance       | IR x C ≥3,000s at 100VDC 1minute at +25°C |

### Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

### Marking



### Part Number System

| F              | AE                                    | 45            | K                   | 506   | U11                      | QVE                          | C                               |
|----------------|---------------------------------------|---------------|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series                                | Voltage (VAC) | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Bottom Stud Code                |
| F = Film       | AC Motor Run type, Metallized PP Film | 450=45        | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Bottom Stud Code Table |

### Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Terminal Space) |   | Digit Three<br>(Terminal Size) |   |
|-----------------------------------|---|-------------------------------|---|--------------------------------|---|
| Fast On                           | P | 16mm                          | T | Fast On 2+2                    | E |
| Fast On + Stud                    | Q | 18mm                          | U | Fast On 4+4                    | F |
|                                   |   | 20mm                          | V |                                |   |

### Bottom Stud Code

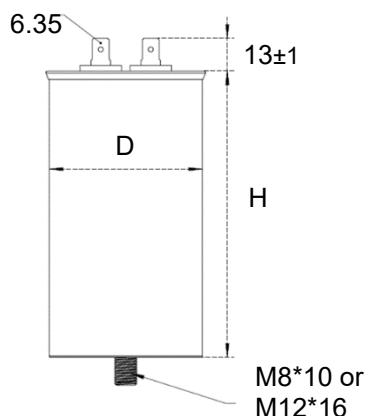
| Bottom Stud    |   |
|----------------|---|
| Bottom M8*10   | C |
| Bottom M12*16  | D |
| No Bottom Stud | E |

### Size Code Table

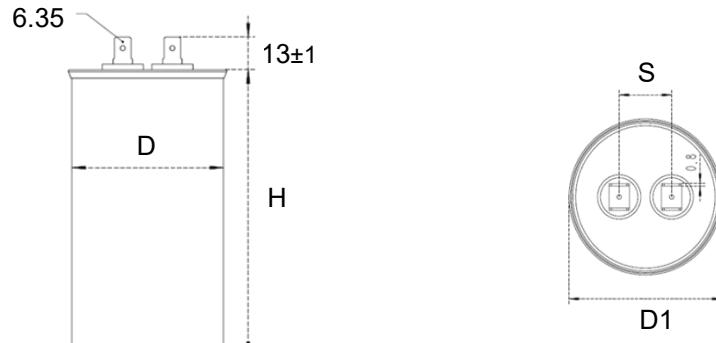
| Digit One<br>Case Diameter: D ± 1.0 |   | Digit Two and Three<br>Case Height: L ± 1.0 |    |
|-------------------------------------|---|---|----|
| 40.0mm                              | T | 55mm  | 55 |
| 45.0mm                              | Z | 65mm  | 65 |
| 50.0mm                              | U | 75mm  | 75 |
| 55.0mm                              | V | 85mm  | 85 |
| 60.0mm                              | W | 100mm                                       | 10 |
| 63.5mm                              | 1 | 110mm                                       | 11 |
|                                     |   | 125mm                                       | 12 |
|                                     |   | 148mm                                       | 15 |

### Dimension (mm)

#### Fast-on terminals with bottom stud



#### Fast-on terminals without bottom stud



### Rating and Part Number

| Vac | Cap Value $\mu\text{F}$ | D $\pm 1$ | D $\pm 1$ | H $\pm 2$ | S $\pm 1$ | Part Number      |
|-----|-------------------------|-----------|-----------|-----------|-----------|------------------|
|     |                         | mm        | mm        | mm        | mm        |                  |
| 450 | 2.0                     | 40.0      | 43.0      | 55.0      | 16.0      | FAE45K205T55QTEC |
| 450 | 3.0                     | 40.0      | 43.0      | 55.0      | 16.0      | FAE45K305T55QTEC |
| 450 | 4.0                     | 40.0      | 43.0      | 55.0      | 16.0      | FAE45K405T55QTEC |
| 450 | 5.0                     | 40.0      | 43.0      | 55.0      | 16.0      | FAE45K505T55QTEC |
| 450 | 7.5                     | 40.0      | 43.0      | 65.0      | 16.0      | FAE45K755T65QTEC |
| 450 | 10.0                    | 40.0      | 43.0      | 65.0      | 16.0      | FAE45K106T65QTEC |
| 450 | 12.5                    | 40.0      | 43.0      | 75.0      | 16.0      | FAE45K136T75QTEC |
| 450 | 15.0                    | 40.0      | 43.0      | 75.0      | 16.0      | FAE45K156T75QTEC |
| 450 | 17.5                    | 40.0      | 43.0      | 75.0      | 16.0      | FAE45K186T75QTEC |
| 450 | 20.0                    | 50.0      | 53.0      | 65.0      | 20.0      | FAE45K206U65QVEC |
| 450 | 25.0                    | 50.0      | 53.0      | 75.0      | 20.0      | FAE45K256U75QVEC |
| 450 | 30.0                    | 50.0      | 53.0      | 85.0      | 20.0      | FAE45K306U85QVEC |
| 450 | 35.0                    | 50.0      | 53.0      | 85.0      | 20.0      | FAE45K356U85QVEC |
| 450 | 40.0                    | 50.0      | 53.0      | 100.0     | 20.0      | FAE45K406U10QVEC |
| 450 | 45.0                    | 50.0      | 53.0      | 110.0     | 20.0      | FAE45K456U11QVEC |
| 450 | 50.0                    | 50.0      | 53.0      | 110.0     | 20.0      | FAE45K506U11QVEC |
| 450 | 55.0                    | 50.0      | 53.0      | 125.0     | 20.0      | FAE45K556U12QVEC |
| 450 | 60.0                    | 50.0      | 53.0      | 125.0     | 20.0      | FAE45K606U12QVEC |
| 450 | 65.0                    | 55.0      | 58.0      | 110.0     | 20.0      | FAE45K656V11QVEC |
| 450 | 70.0                    | 55.0      | 58.0      | 125.0     | 20.0      | FAE45K706V12QVEC |
| 450 | 80.0                    | 60.0      | 63.0      | 125.0     | 20.0      | FAE45K806W12QVEC |
| 450 | 100.0                   | 63.5      | 66.5      | 125.0     | 20.0      | FAE45K107112QVEC |

## Packaging Information

Capacitors are well protected by foams. And then are packaged in the cartons.

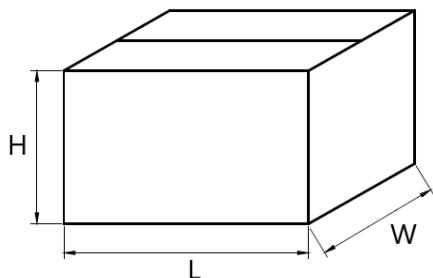


Table 1 carton dimensions

| Carton No. | L (mm) | W (mm) | H (mm) |
|------------|--------|--------|--------|
| 1          | 375    | 285    | 235    |
| 2          | 375    | 285    | 300    |
| 3          | 375    | 285    | 330    |
| 4          | 375    | 285    | 365    |
| 5          | 375    | 285    | 265    |

According to the capacitor's diameter, every carton contains capacitors as per the following Table 2.

Table 2 Capacitor quantity of each carton

| Capacitor Diameter (mm) | Quantity (pcs) |
|-------------------------|----------------|
| 40                      | 40             |
| 45                      | 40             |
| 50                      | 30             |
| 55                      | 30             |
| 60                      | 24             |
| 63.5                    | 24             |

## Overview

The FAF series capacitors are designed for motor run system, consist of metallized polypropylene film, enclosed in cylindrical Al case filled with oil, fast-on terminals

## Applications

Widely used in home appliance in the following applications, refrigerators, freezers, electrical compressors, washers and air conditioners.

## Features

- Self-healing property
- Overpressure disconnector device
- 10K AFC protected
- Fast-on terminals 6.3\*0.8mm
- High reliability
- Motor run capacitor



## Applicable Standard

| Approval | Specification | File Number |
|----------|---------------|-------------|
|          | Components    | E500536     |

## General Technical Data

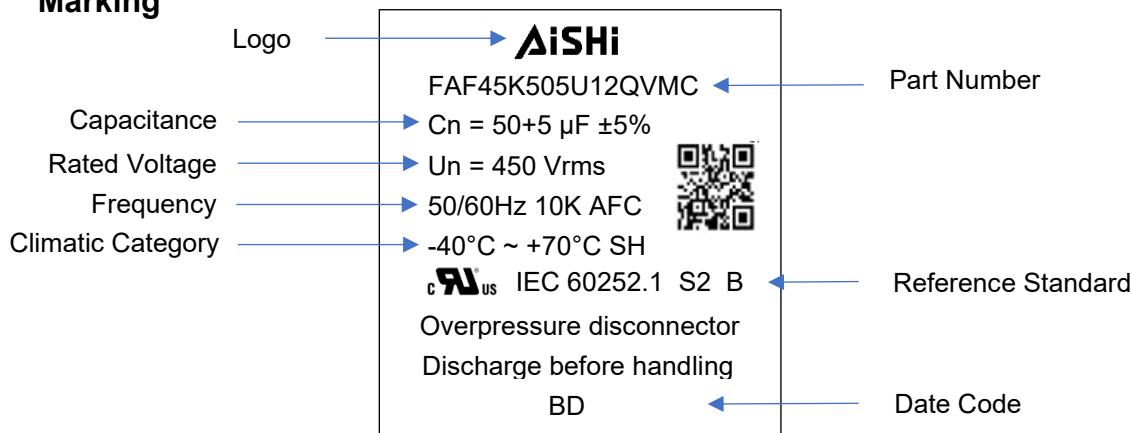
|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film             |
| Voltage Range               | 230Vac ~ 450Vac 50/60Hz                   |
| Capacitance Range           | 15+1.5μF~80+15μF                          |
| Capacitance Tolerance       | ±5% or ±10% at +25°C                      |
| Operating Temperature Range | -40°C ~ +85°C                             |
| Climatic Category           | 40/85/56 IEC60068-1                       |
| Dissipation Factor          | ≤0.0010 at 100Hz                          |
| Insulation Resistance       | IR x C ≥3,000s at 100VDC 1minute at +25°C |

## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

### Marking



### Part Number System

| F              | AE                                    | 50            | J                   | 906   | 115                      | PVE                          | E                               |
|----------------|---------------------------------------|---------------|---------------------|---|--------------------------|------------------------------|---------------------------------|
| Capacitor Type | Series                                | Voltage (VAC) | Tolerance           | Capacitance (pF)  | Size Code                | Terminal Code                | Bottom Stud Code                |
| F = Film       | AC Motor Run type, Metallized PP Film | 450=45        | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Size Code Table | Refer to Terminal Code Table | Refer to Bottom Stud Code Table |

### Terminal Code

| Digit One<br>(Lead/Terminal Type) |   | Digit Two<br>(Terminal Space) |   | Digit Three<br>(Terminal Size) |   |
|-----------------------------------|---|-------------------------------|---|--------------------------------|---|
| Fast On                           | P | 16mm                          | T | Fast On 2+2                    | E |
| Fast On + Stud                    | Q | 18mm                          | U | Fast On 4+4                    | F |
|                                   |   | 20mm                          | V | Fast On 2+2+2                  | M |
|                                   |   |                               |   | Fast On 2+3+4                  | N |

### Bushing Code

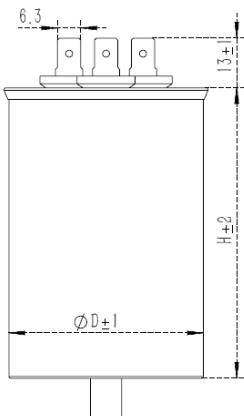
| Bottom Stud    |   |
|----------------|---|
| Bottom M8*10   | C |
| Bottom M12*16  | D |
| No Bottom Stud | E |

### Size Code Table

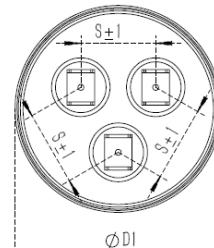
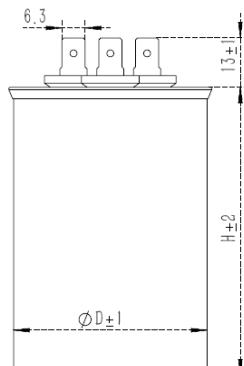
| Digit One<br>Case Diameter: D ± 1.0 |   | Digit Two and Three<br>Case Height: L ± 1.0 |    |
|-------------------------------------|---|---|----|
| 50.0mm                              | U | 75mm  | 75 |
| 55.0mm                              | V | 85mm  | 85 |
| 60.0mm                              | W | 95mm  | 95 |
|                                     |   | 105mm                                       | 10 |
|                                     |   | 120mm                                       | 12 |
|                                     |   | 125mm                                       | 12 |
|                                     |   | 135mm                                       | 13 |
|                                     |   | 148mm                                       | 15 |

### Dimension (mm)

**Fast-on terminals with bottom stud**



**Fast-on terminals without bottom stud**



### Rating and Part Number

| Vac | Cap Value $\mu\text{F}$ | D $\pm 1$ | D $1 \pm 1$ | H $\pm 2$ | S $\pm 1$ | Part Number      |
|-----|-------------------------|-----------|-------------|-----------|-----------|------------------|
|     |                         | mm        | mm          | mm        | mm        |                  |
| 450 | 15 $\pm 1.5$            | 50.0      | 53.0        | 75.0      | 20.0      | FAF45K151U75QVMC |
| 450 | 20 $\pm 1.5$            | 50.0      | 53.0        | 85.0      | 20.0      | FAF45K201U85QVMC |
| 450 | 25 $\pm 3$              | 50.0      | 53.0        | 85.0      | 20.0      | FAF45K253U85QVMC |
| 450 | 30 $\pm 5$              | 50.0      | 53.0        | 95.0      | 20.0      | FAF45K305U95QVMC |
| 450 | 35 $\pm 5$              | 50.0      | 53.0        | 105.0     | 20.0      | FAF45K355U10QVMC |
| 450 | 40 $\pm 5$              | 50.0      | 53.0        | 120.0     | 20.0      | FAF45K405U12QVMC |
| 450 | 45 $\pm 5$              | 50.0      | 53.0        | 120.0     | 20.0      | FAF45K455U12QVMC |
| 450 | 45 $\pm 7.5$            | 50.0      | 53.0        | 125.0     | 20.0      | FAF45K458U12QVMC |
| 450 | 50 $\pm 5$              | 50.0      | 53.0        | 125.0     | 20.0      | FAF45K505U12QVMC |
| 450 | 50 $\pm 7.5$            | 50.0      | 53.0        | 125.0     | 20.0      | FAF45K508U12QVMC |
| 450 | 55 $\pm 7.5$            | 55.0      | 58.0        | 125.0     | 20.0      | FAF45K558V12QVMC |
| 450 | 60 $\pm 7.5$            | 55.0      | 58.0        | 125.0     | 20.0      | FAF45K608V12QVMC |
| 450 | 65 $\pm 7.5$            | 60.0      | 63.0        | 120.0     | 20.0      | FAF45K658W12QVMC |
| 450 | 70 $\pm 7.5$            | 60.0      | 63.0        | 125.0     | 20.0      | FAF45K708W12QVMC |
| 450 | 80 $\pm 10$             | 60.0      | 63.0        | 135.0     | 20.0      | FAF45K80AW13QVMC |

## Packaging Information

Capacitors are well protected by foams. And then are packaged in the cartons.

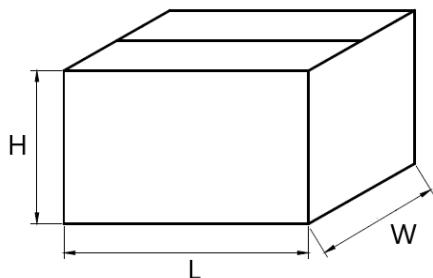


Table 1 carton dimensions

| Carton No. | L (mm) | W (mm) | H (mm) |
|------------|--------|--------|--------|
| 1          | 375    | 285    | 235    |
| 2          | 375    | 285    | 300    |
| 3          | 375    | 285    | 330    |
| 4          | 375    | 285    | 365    |
| 5          | 375    | 285    | 265    |

According to the capacitor's diameter, every carton contains capacitors as per the following Table 2.

Table 2 Capacitor quantity of each carton

| Capacitor Diameter (mm) | Quantity (pcs) |
|-------------------------|----------------|
| 40                      | 40             |
| 50                      | 30             |
| 55                      | 30             |
| 60                      | 24             |
| 63.5                    | 24             |

## Overview

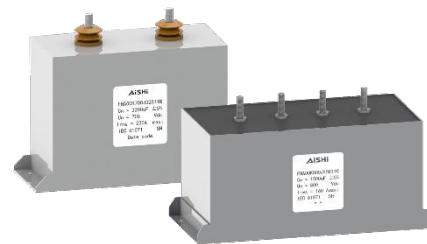
The FHA capacitor is constructed of metallized polypropylene film, sealed with epoxy in aluminum case or stainless-steel casing. These capacitors are suitable for high capacitance requirement of DC-Link circuits.

## Applications

DC Link, DC Filtering circuit. Energy storage, High Voltage Direct Current (HVDC) transmission systems.

## Features

- High capacitance density
- Self-healing technology
- High ripple current
- High performance and high reliability



## Qualification

|                    |                      |
|--------------------|----------------------|
| Reference Standard | IEC 61071            |
| Climate Category   | 40/70/21 IEC 60068-1 |

## General Technical Data

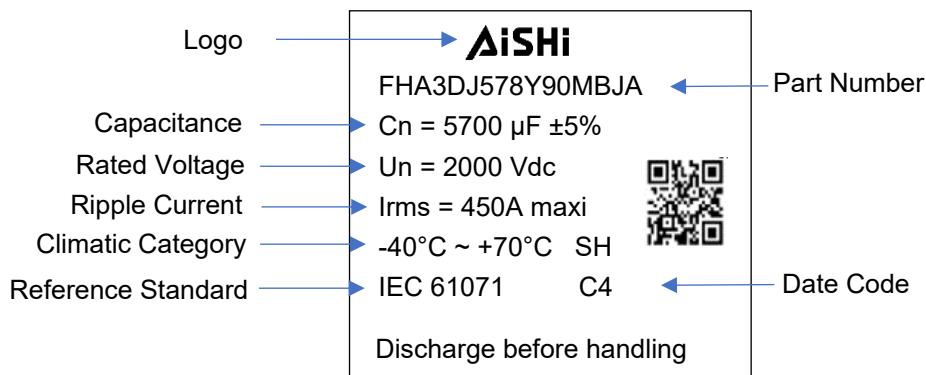
|                             |   |
|-----------------------------|---|
| Dielectric                  | Metallized Polypropylene Film                 |
| Voltage Range               | 450Vdc ~ 3000Vdc                              |
| Capacitance Range           | 1000µF ~ 20,000µF                             |
| Capacitance Tolerance       | ±5% or ±10% at +25°C                          |
| Operating Temperature Range | -40°C ~ +70°C                                 |
| Climatic Category           | 40/70/21 IEC 60068-1                          |
| Dissipation Factor          | ≤0.0030 (20°C, at 100Hz)                      |
| Insulation Resistance       | IR x C ≥10,000s at 100Vdc, 1 minutest at 25°C |

## Manufacturing Date Code

| Year | Code | Month | Code |
|------|------|-------|------|
| 2018 | A    | Jan   | 1    |
| 2019 | B    | Feb   | 2    |
| 2020 | C    | Mar   | 3    |
| 2021 | D    | Apr   | 4    |
| 2022 | E    | May   | 5    |
| 2023 | F    | Jun   | 6    |

| Year | Code | Month | Code |
|------|------|-------|------|
| 2024 | G    | Jul   | 7    |
| 2025 | H    | Aug   | 8    |
| 2026 | J    | Sep   | 9    |
| 2027 | K    | Oct   | A    |
| 2028 | L    | Nov   | N    |
| 2029 | M    | Dec   | D    |

## Marking



## Part Number System

| F              | HA   | 3D   | J                   | 578   | Y90                                 | MBJ                          | A                           |
|----------------|--|--|---------------------|---|-------------------------------------|------------------------------|-----------------------------|
| Capacitor Type | Series   | Voltage (VDC)  | Tolerance           | Capacitance (pF)  | Case Code                           | Terminal Code                | Bushing Code                |
| F = Film       | DC Link,<br>Power<br>Capacitor,<br>Metallized<br>PP Film | 450=2W<br>1000=3K<br>1100=3M<br>1500=3U<br>2000=3D<br>2500=3E<br>3000=3F | J = ±5%<br>K = ±10% | First two digits = significant figures.<br>Third digit = Number of zeros. | Refer to Customized Case Code Table | Refer to Terminal Code Table | Refer to Bushing Code Table |

## Customized Case Code Table

| Drawing Code 1 | Drawing Code 2 | Drawing Code 3 |
|----------------|----------------|----------------|
| A ~ Z          | 0 ~ 9          | 0 ~ 9          |

## Terminal Code

## Bushing Code

| Digit One<br>(Terminal Type) |   | Digit Two<br>(Terminal Space) |   | Digit Three<br>(Terminal Size) |   | Bushing<br>Code |   |
|------------------------------|---|-------------------------------|---|--------------------------------|---|-----------------|---|
| Male Terminal                | M | 60mm                          | A | M5                             | 5 | Ø60*30 1 cycle  | A |
| Female Terminal              | F | 80mm                          | B | M6                             | 6 | Ø60*40 3 cycle  | B |
|                              |   | 100mm                         | C | M8                             | 8 | Ø40*40 3 cycle  | C |
|                              |   | 120mm                         | D | M10                            | H |                 |   |
|                              |   |                               |   | M12                            | J |                 |   |
|                              |   |                               |   | M16                            | K |                 |   |

## Terminal Configuration

Fig. 1 – Capacitor with 2 terminals

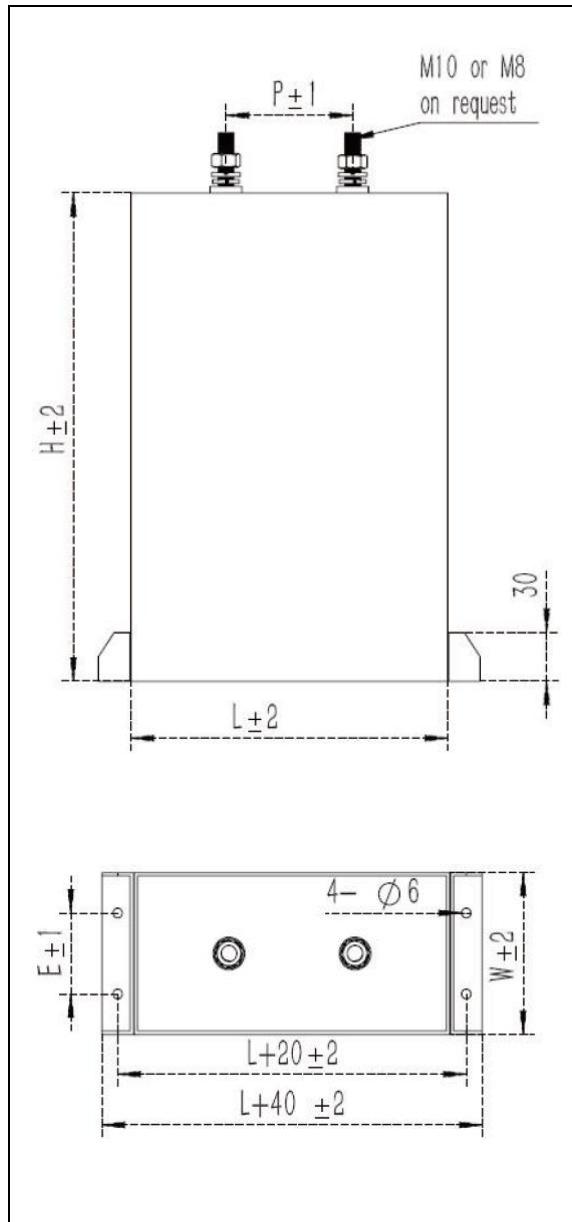
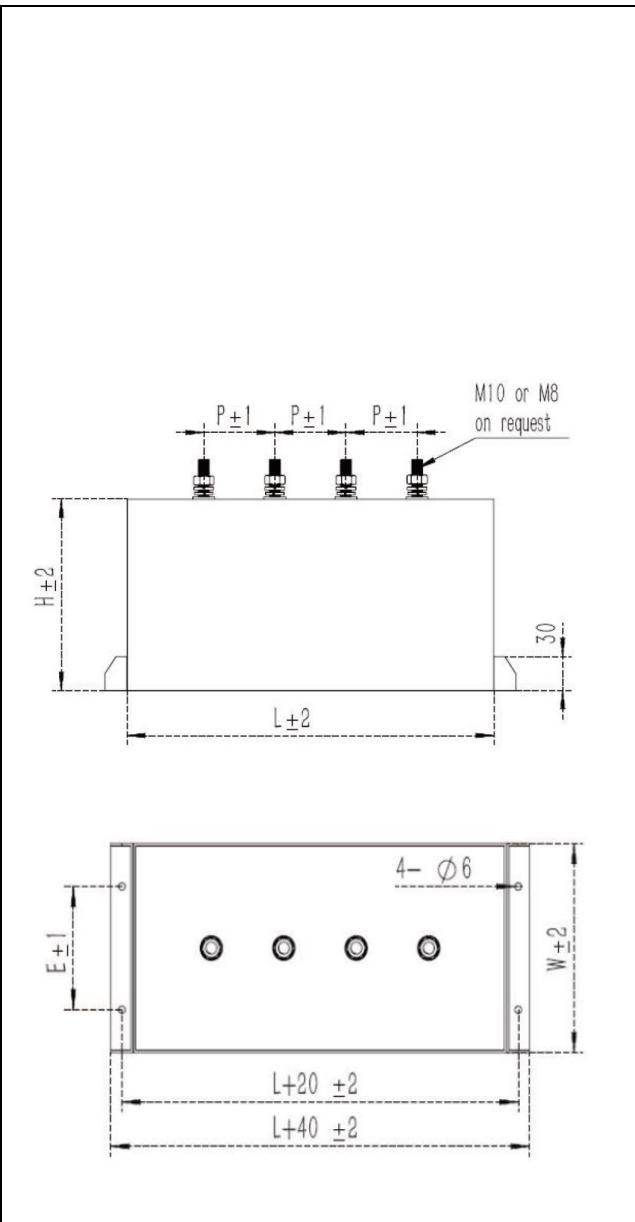


Fig. 2 – Capacitor with 4 terminals



## Terminal Configuration

Fig. 3 – Capacitor with 6 terminals

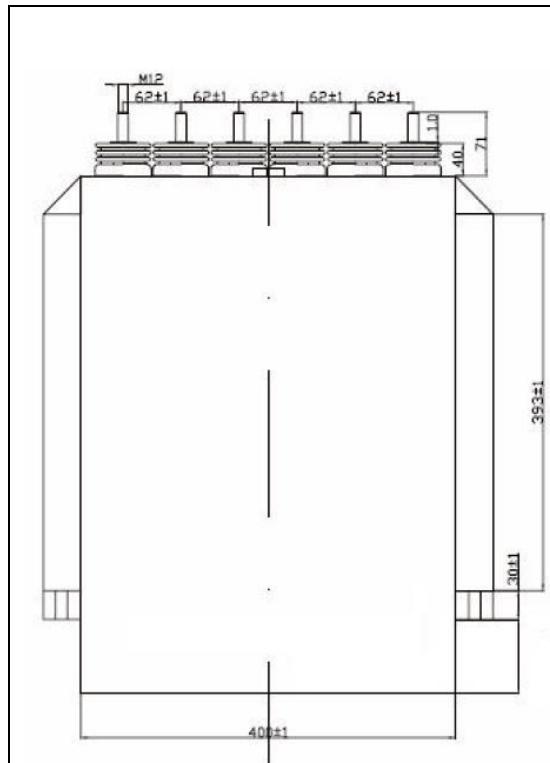
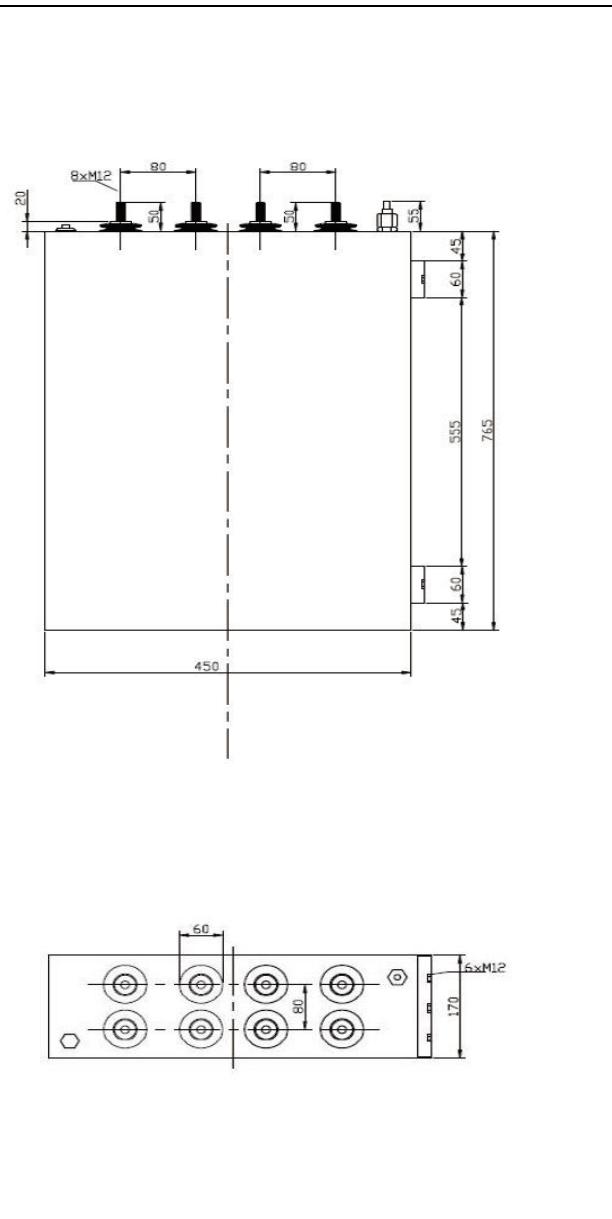


Fig. 4 – Capacitor with 8 terminals





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