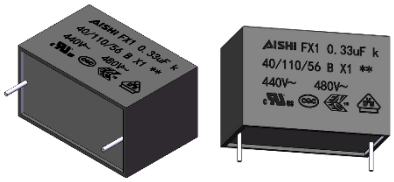
Metallized Polypropylene Film EMI Suppression Capacitors
FX1 Series - Class X1 350/440/480/530/760VAC

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.

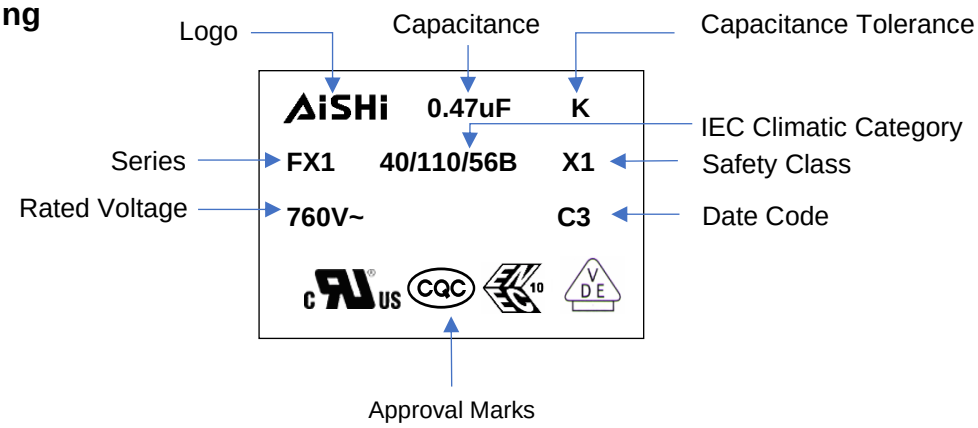
Features
- High stability of capacitance
- High temperature (110°C)
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin



Approvals

Marking	Standard	File Number
c UL us	UL 60384-14 and, CAN/CSA-E60384-14	E500538
IEC 10 DVE	EN/IEC 60384-14	40052137

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	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, EMI Capacitor, Metallized PP Film	35=350 44=440 48=480 53=530 60=600 76=760	J = ±5% K = ±10% M = ±20%	First two digits = significant figures. Third digit = Number of zeros.	Refer to Size Code Table	Refer to Terminal Code Table	Refer to Lead Length Table

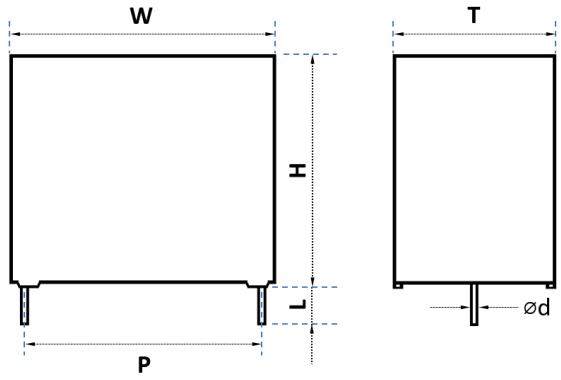
Terminal Code

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	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)



2 pins

Size Code Table (mm)

Size Code	Dimension						Pitch		Lead Wire	
	W	Tolerance	**H**	Tolerance	**T**	Tolerance	**P**	Tolerance	**Ød**	Tolerance
B15	10.0	0.5	11.0	0.5	5.0	0.5	7.5	0.5	0.6	0.05
B16	10.0	0.5	12.0	0.5	6.0	0.5	7.5	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
C26	13.0	0.5	14.0	0.5	8.0	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
E29	18.0	0.5	13.5	0.5	7.5	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
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	0.6	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
G17	32.0	0.8	19.0	0.8	10.0	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
G25	32.0	0.8	24.0	0.8	14.0	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
G30	32.0	0.8	25.0	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
K10	42.5	0.8	22.0	0.8	11.0	0.8	37.5	0.5	1.0	0.05
K11	42.5	0.8	24.0	0.8	13.0	0.8	37.5	0.5	1.0	0.05
K13	42.5	0.8	26.0	0.8	15.0	0.8	37.5	0.5	1.0	0.05
K15	42.5	0.8	32.0	0.8	16.0	0.8	37.5	0.5	1.0	0.05
K18	42.5	0.8	30.0	0.8	17.0	0.8	37.5	0.5	1.0	0.05
K20	42.5	0.8	28.0	0.8	19.0	0.8	37.5	0.5	1.0	0.05
K21	42.5	0.8	32.0	0.8	19.0	0.8	37.5	0.5	1.0	0.05
K24	42.5	0.8	40.0	0.8	20.0	0.8	37.5	0.5	1.0	0.05
K27	42.5	0.8	37.0	0.8	22.0	0.8	37.5	0.5	1.0	0.05
K32	42.5	0.8	44.0	0.8	24.0	0.8	37.5	0.5	1.0	0.05
K37	42.5	0.8	37.0	0.8	28.0	0.8	37.5	0.5	1.0	0.05
K39	42.5	0.8	43.0	0.8	28.0	0.8	37.5	0.5	1.0	0.05
K42	42.5	0.8	45.0	0.8	30.0	0.8	37.5	0.5	1.0	0.05
K47	42.5	0.8	50.0	0.8	35.0	0.8	37.5	0.5	1.0	0.05
K65	42.5	0.8	26.0	0.8	12.0	0.8	37.5	0.5	1.0	0.05
K66	42.5	0.8	28.0	0.8	14.0	0.8	37.5	0.5	1.0	0.05
M16	57.5	1.0	45.0	1.0	30.0	1.0	52.5	0.5	1.2	0.05
M20	57.5	1.0	50.0	1.0	35.0	1.0	52.5	0.5	1.2	0.05
M34	57.5	1.0	65.0	1.0	45.0	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	
350	700	0.01	18.0	11.0	5.0	15.0	4	12	400	0.6	FX135K103E142EL5
350	700	0.012	18.0	11.0	5.0	15.0	4.8	14.4	400	0.6	FX135K123E142EL5
350	700	0.015	18.0	11.0	5.0	15.0	6	18	400	0.6	FX135K153E142EL5
350	700	0.018	18.0	11.0	5.0	15.0	7.2	21.6	400	0.6	FX135K183E142EL5
350	700	0.022	18.0	11.0	5.0	15.0	8.8	26.4	400	0.6	FX135K223E142EL5
350	700	0.027	18.0	11.0	5.0	15.0	10.8	32.4	400	0.6	FX135K273E142EL5
350	700	0.033	18.0	11.0	5.0	15.0	13.2	39.6	400	0.6	FX135K333E142EL5
350	700	0.039	18.0	11.0	5.0	15.0	15.6	46.8	400	0.6	FX135K393E142EL5
350	700	0.047	18.0	11.0	5.0	15.0	18.8	56.4	400	0.6	FX135K473E142EL5
350	700	0.056	18.0	11.0	5.0	15.0	22.4	67.2	400	0.6	FX135K563E142EL5
350	700	0.068	18.0	12.0	6.0	15.0	27.2	81.6	400	0.6	FX135K683E172EL5
350	700	0.082	18.0	12.0	6.0	15.0	32.8	98.4	400	0.6	FX135K823E172EL5
350	700	0.1	18.0	13.0	7.0	15.0	40	120	400	0.8	FX135K104E212EL5
350	700	0.1	18.0	17.5	6.0	15.0	40	120	400	0.6	FX135K104E192EL5
350	700	0.12	18.0	13.5	7.5	15.0	48	144	400	0.8	FX135K124E292EL5
350	700	0.12	18.0	17.5	6.0	15.0	48	144	400	0.6	FX135K124E192EL5
350	700	0.15	18.0	14.0	8.0	15.0	60	180	400	0.8	FX135K154E312EL5
350	700	0.18	18.0	14.5	8.5	15.0	72	216	400	0.8	FX135K184E342EL5
350	700	0.22	18.0	16.0	10.0	15.0	88	264	400	0.8	FX135K224E432EL5
350	700	0.27	18.0	19.0	11.0	15.0	108	324	400	0.8	FX135K274E472EL5
350	700	0.33	18.0	19.0	11.0	15.0	132	396	400	0.8	FX135K334E472EL5
350	700	0.039	26.0	15.5	6.0	22.5	7.8	23.4	200	0.8	FX135K393F142FL5
350	700	0.047	26.0	15.5	6.0	22.5	9.4	28.2	200	0.8	FX135K473F142FL5
350	700	0.056	26.0	15.5	6.0	22.5	11.2	33.6	200	0.8	FX135K563F142FL5
350	700	0.068	26.0	15.5	6.0	22.5	13.6	40.8	200	0.8	FX135K683F142FL5
350	700	0.082	26.0	15.5	6.0	22.5	16.4	49.2	200	0.8	FX135K823F142FL5
350	700	0.1	26.0	15.5	6.0	22.5	20	60	200	0.8	FX135K104F142FL5
350	700	0.12	26.0	15.5	6.0	22.5	24	72	200	0.8	FX135K124F142FL5
350	700	0.15	26.0	15.5	6.0	22.5	30	90	200	0.8	FX135K154F142FL5
350	700	0.18	26.0	15.5	6.0	22.5	36	108	200	0.8	FX135K184F142FL5
350	700	0.22	26.0	16.5	7.0	22.5	44	132	200	0.8	FX135K224F172FL5
350	700	0.27	26.0	16.5	7.0	22.5	54	162	200	0.8	FX135K274F172FL5
350	700	0.33	26.0	17.0	8.5	22.5	66	198	200	0.8	FX135K334F202FL5
350	700	0.47	26.0	19.0	10.0	22.5	94	282	200	0.8	FX135K474F242FL5
350	700	0.56	26.0	20.0	11.0	22.5	112	336	200	0.8	FX135K564F262FL5
350	700	0.68	26.0	22.0	12.0	22.5	136	408	200	0.8	FX135K684F272FL5
350	700	0.82	26.0	24.5	13.0	22.5	164	492	200	0.8	FX135K824F302FL5
350	700	1	26.0	25.0	15.0	22.5	200	600	200	0.8	FX135K105F362FL5
350	700	1.2	26.0	29.5	14.5	22.5	240	720	200	0.8	FX135K125F342FL5
350	700	0.15	32.0	18.0	9.0	27.5	22.5	67.5	150	0.8	FX135K154G152GL5
350	700	0.18	32.0	18.0	9.0	27.5	27	81	150	0.8	FX135K184G152GL5
350	700	0.22	32.0	18.0	9.0	27.5	33	99	150	0.8	FX135K224G152GL5
350	700	0.33	32.0	18.0	9.0	27.5	49.5	148.5	150	0.8	FX135K334G152GL5
350	700	0.39	32.0	18.0	9.0	27.5	58.5	175.5	150	0.8	FX135K394G152GL5
350	700	0.47	32.0	18.0	9.0	27.5	70.5	211.5	150	0.8	FX135K474G152GL5
350	700	0.56	32.0	20.0	11.0	27.5	84	252	150	0.8	FX135K564G182GL5
350	700	0.68	32.0	20.0	11.0	27.5	102	306	150	0.8	FX135K684G182GL5
350	700	0.82	32.0	20.0	11.0	27.5	123	369	150	0.8	FX135K824G182GL5

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	1	32.0	22.0	13.0	27.5	150	450	150	0.8	FX135K105G212GL5
350	700	1	32.0	24.5	13.0	27.5	150	450	150	0.8	FX135K105G222GL5
350	700	1.2	32.0	25.0	16.0	27.5	180	540	150	0.8	FX135K125G302GL5
350	700	1.2	32.0	28.0	14.0	27.5	180	540	150	0.8	FX135K125G262GL5
350	700	1.5	32.0	25.0	16.0	27.5	225	675	150	0.8	FX135K155G302GL5
350	700	1.5	32.0	28.0	14.0	27.5	225	675	150	0.8	FX135K155G262GL5
350	700	1.8	32.0	28.0	18.0	27.5	270	810	150	0.8	FX135K185G332GL5
350	700	2.2	32.0	28.0	18.0	27.5	330	990	150	0.8	FX135K225G332GL5
350	700	2.2	32.0	33.0	18.0	27.5	330	990	150	0.8	FX135K225G342GL5
350	700	2.7	32.0	37.0	22.0	27.5	405	1215	150	0.8	FX135K275G402GL5
350	700	3.3	32.0	37.0	22.0	27.5	495	1485	150	0.8	FX135K335G402GL5
350	700	0.39	42.5	22.0	11.0	37.5	39	117	100	1.0	FX135K394K102KL5
350	700	0.47	42.5	22.0	11.0	37.5	47	141	100	1.0	FX135K474K102KL5
350	700	0.56	42.5	22.0	11.0	37.5	56	168	100	1.0	FX135K564K102KL5
350	700	0.68	42.5	22.0	11.0	37.5	68	204	100	1.0	FX135K684K102KL5
350	700	0.82	42.5	22.0	11.0	37.5	82	246	100	1.0	FX135K824K102KL5
350	700	1	42.5	22.0	11.0	37.5	100	300	100	1.0	FX135K105K102KL5
350	700	1.2	42.5	24.0	13.0	37.5	120	360	100	1.0	FX135K125K112KL5
350	700	1.5	42.5	26.0	15.0	37.5	150	450	100	1.0	FX135K155K132KL5
350	700	1.8	42.5	26.0	15.0	37.5	180	540	100	1.0	FX135K185K132KL5
350	700	2.2	42.5	30.0	17.0	37.5	220	660	100	1.0	FX135K225K182KL5
350	700	2.2	42.5	28.0	19.0	37.5	220	660	100	1.0	FX135K225K202KL5
350	700	2.7	42.5	32.0	19.0	37.5	270	810	100	1.0	FX135K275K212KL5
350	700	3.3	42.5	32.0	19.0	37.5	330	990	100	1.0	FX135K335K212KL5
350	700	4.7	42.5	37.0	22.0	37.5	470	1410	100	1.0	FX135K475K272KL5
350	700	5.6	42.5	44.0	24.0	37.5	560	1680	100	1.0	FX135K565K322KL5
440/480	1000	0.01	18.0	11.0	5.0	15.0	4	12	400	0.6	FX148K103E142EL5
440/480	1000	0.012	18.0	11.0	5.0	15.0	4.8	14.4	400	0.6	FX148K123E142EL5
440/480	1000	0.015	18.0	11.0	5.0	15.0	6	18	400	0.6	FX148K153E142EL5
440/480	1000	0.018	18.0	11.0	5.0	15.0	7.2	21.6	400	0.6	FX148K183E142EL5
440/480	1000	0.022	18.0	11.0	5.0	15.0	8.8	26.4	400	0.6	FX148K223E142EL5
440/480	1000	0.027	18.0	11.0	5.0	15.0	10.8	32.4	400	0.6	FX148K273E142EL5
440/480	1000	0.033	18.0	11.0	5.0	15.0	13.2	39.6	400	0.6	FX148K333E142EL5
440/480	1000	0.039	18.0	12.0	6.0	15.0	15.6	46.8	400	0.6	FX148K393E172EL5
440/480	1000	0.047	18.0	12.0	6.0	15.0	18.8	56.4	400	0.6	FX148K473E172EL5
440/480	1000	0.056	18.0	13.0	7.0	15.0	22.4	67.2	400	0.8	FX148K563E212EL5
440/480	1000	0.068	18.0	13.5	7.5	15.0	27.2	81.6	400	0.8	FX148K683E292EL5
440/480	1000	0.082	18.0	14.0	8.0	15.0	32.8	98.4	400	0.8	FX148K823E312EL5
440/480	1000	0.1	18.0	14.5	8.5	15.0	40	120	400	0.8	FX148K104E342EL5
440/480	1000	0.12	18.0	16.0	10.0	15.0	48	144	400	0.8	FX148K124E432EL5
440/480	1000	0.15	18.0	19.0	11.0	15.0	60	180	400	0.8	FX148K154E472EL5
440/480	1000	0.18	18.0	19.0	11.0	15.0	72	216	400	0.8	FX148K184E472EL5
440/480	1000	0.22	18.0	22.0	12.5	15.0	88	264	400	0.8	FX148K224E522EL5
440/480	1000	0.039	26.0	15.5	6.0	22.5	7.8	23.4	200	0.6	FX148K393F142FL5
440/480	1000	0.047	26.0	15.5	6.0	22.5	9.4	28.2	200	0.6	FX148K473F142FL5
440/480	1000	0.056	26.0	15.5	6.0	22.5	11.2	33.6	200	0.6	FX148K563F142FL5
440/480	1000	0.068	26.0	15.5	6.0	22.5	13.6	40.8	200	0.6	FX148K683F142FL5
440/480	1000	0.082	26.0	15.5	6.0	22.5	16.4	49.2	200	0.6	FX148K823F142FL5

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	
440/480	1000	0.1	26.0	15.5	6.0	22.5	20	60	200	0.8	FX148K104F142FL5
440/480	1000	0.12	26.0	15.5	6.0	22.5	24	72	200	0.8	FX148K124F142FL5
440/480	1000	0.15	26.0	16.5	7.0	22.5	30	90	200	0.8	FX148K154F172FL5
440/480	1000	0.18	26.0	17.0	8.5	22.5	36	108	200	0.8	FX148K184F202FL5
440/480	1000	0.22	26.0	17.0	8.5	22.5	44	132	200	0.8	FX148K224F202FL5
440/480	1000	0.27	26.0	19.0	10.0	22.5	54	162	200	0.8	FX148K274F242FL5
440/480	1000	0.33	26.0	20.0	11.0	22.5	66	198	200	0.8	FX148K334F262FL5
440/480	1000	0.39	26.0	20.0	11.0	22.5	78	234	200	0.8	FX148K394F262FL5
440/480	1000	0.47	26.0	24.5	13.0	22.5	94	282	200	0.8	FX148K474F302FL5
440/480	1000	0.56	26.0	25.0	15.0	22.5	112	336	200	0.8	FX148K564F362FL5
440/480	1000	0.68	26.0	29.5	14.5	22.5	136	408	200	0.8	FX148K684F342FL5
440/480	1000	0.15	32.0	18.0	9.0	27.5	22.5	67.5	150	0.8	FX148K154G152GL5
440/480	1000	0.18	32.0	18.0	9.0	27.5	27	81	150	0.8	FX148K184G152GL5
440/480	1000	0.22	32.0	18.0	9.0	27.5	33	99	150	0.8	FX148K224G152GL5
440/480	1000	0.33	32.0	18.0	9.0	27.5	49.5	148.5	150	0.8	FX148K334G152GL5
440/480	1000	0.39	32.0	20.0	11.0	27.5	58.5	175.5	150	0.8	FX148K394G182GL5
440/480	1000	0.47	32.0	20.0	11.0	27.5	70.5	211.5	150	0.8	FX148K474G182GL5
440/480	1000	0.56	32.0	22.0	13.0	27.5	84	252	150	0.8	FX148K564G212GL5
440/480	1000	0.68	32.0	24.5	13.0	27.5	102	306	150	0.8	FX148K684G222GL5
440/480	1000	0.82	32.0	25.0	16.0	27.5	123	369	150	0.8	FX148K824G302GL5
440/480	1000	0.82	32.0	28.0	14.0	27.5	123	369	150	0.8	FX148K824G262GL5
440/480	1000	1	32.0	28.0	18.0	27.5	150	450	150	0.8	FX148K105G332GL5
440/480	1000	1.2	32.0	33.0	18.0	27.5	180	540	150	0.8	FX148K125G342GL5
440/480	1000	1.5	32.0	33.0	18.0	27.5	225	675	150	0.8	FX148K155G342GL5
440/480	1000	1.8	32.0	37.0	22.0	27.5	270	810	150	0.8	FX148K185G402GL5
440/480	1000	0.33	42.5	22.0	11.0	37.5	33	99	100	1.0	FX148K334K102KL5
440/480	1000	0.39	42.5	22.0	11.0	37.5	39	117	100	1.0	FX148K394K102KL5
440/480	1000	0.47	42.5	22.0	11.0	37.5	47	141	100	1.0	FX148K474K102KL5
440/480	1000	0.56	42.5	22.0	11.0	37.5	56	168	100	1.0	FX148K564K102KL5
440/480	1000	0.68	42.5	22.0	11.0	37.5	68	204	100	1.0	FX148K684K102KL5
440/480	1000	0.82	42.5	24.0	13.0	37.5	82	246	100	1.0	FX148K824K112KL5
440/480	1000	1	42.5	24.0	13.0	37.5	100	300	100	1.0	FX148K105K112KL5
440/480	1000	1.2	42.5	26.0	15.0	37.5	120	360	100	1.0	FX148K125K132KL5
440/480	1000	1.5	42.5	30.0	17.0	37.5	150	450	100	1.0	FX148K155K182KL5
440/480	1000	1.8	42.5	28.0	19.0	37.5	180	540	100	1.0	FX148K185K202KL5
440/480	1000	2.2	42.5	32.0	19.0	37.5	220	660	100	1.0	FX148K225K212KL5
440/480	1000	2.7	42.5	37.0	22.0	37.5	270	810	100	1.0	FX148K275K272KL5
440/480	1000	3.3	42.5	44.0	24.0	37.5	330	990	100	1.0	FX148K335K322KL5
440/480	1000	3.9	42.5	43.0	28.0	37.5	390	1170	100	1.0	FX148K395K392KL5
440/480	1000	4.7	42.5	45.0	30.0	37.5	470	1410	100	1.0	FX148K475K422KL5
440/480	1000	5.6	57.5	45.0	30.0	52.5	336	1008	60	1.2	FX148K565M162ML5
530	1100	0.0068	18.0	11.0	5.0	15.0	2.72	8.16	400	0.6	FX153K682E142EL5
530	1100	0.0082	18.0	11.0	5.0	15.0	3.28	9.84	400	0.6	FX153K822E142EL5
530	1100	0.01	18.0	11.0	5.0	15.0	4	12	400	0.6	FX153K103E142EL5
530	1100	0.022	18.0	12.0	6.0	15.0	8.8	26.4	400	0.6	FX153K223E172EL5
530	1100	0.033	18.0	13.5	7.5	15.0	13.2	39.6	400	0.8	FX153K334E292EL5
530	1100	0.047	18.0	14.5	8.5	15.0	18.8	56.4	400	0.8	FX153K473E342EL5
530	1100	0.056	18.0	14.5	8.5	15.0	22.4	67.2	400	0.8	FX153K563E342EL5

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	0.068	18.0	18.0	9.0	15.0	27.2	81.6	400	0.8	FX153K683E392EL5
530	1100	0.082	18.0	18.0	10.0	15.0	27.2	81.6	400	0.8	FX153K823E452EL5
530	1100	0.1	18.0	19.0	11.0	15.0	40	120	400	0.8	FX153K104E472EL5
530	1100	0.033	26.0	15.5	6.0	22.5	6.6	19.8	200	0.8	FX153K333F142FL5
530	1100	0.047	26.0	15.5	6.0	22.5	9.4	28.2	200	0.8	FX153K473F142FL5
530	1100	0.056	26.0	15.5	6.0	22.5	11.2	33.6	200	0.8	FX153K563F142FL5
530	1100	0.068	26.0	15.5	6.0	22.5	13.6	40.8	200	0.8	FX153K683F142FL5
530	1100	0.082	26.0	15.5	6.0	22.5	16.4	49.2	200	0.8	FX153M823F142FL5
530	1100	0.1	26.0	16.5	7.0	22.5	20	60	200	0.8	FX153K104F172FL5
530	1100	0.15	26.0	17.0	8.5	22.5	30	90	200	0.8	FX153K154F202FL5
530	1100	0.22	26.0	19.0	10.0	22.5	44	132	200	0.8	FX153K224F242FL5
530	1100	0.33	26.0	20.0	11.0	22.5	66	198	200	0.8	FX153M334F262FL5
530	1100	0.33	26.0	22.0	12.0	22.5	66	198	200	0.8	FX153K334F272FL5
530	1100	0.47	26.0	29.5	14.5	22.5	94	282	200	0.8	FX153K474F342FL5
530	1100	0.15	32.0	20.0	11.0	27.5	22.5	67.5	150	0.8	FX153K154G182GL5
530	1100	0.22	32.0	20.0	11.0	27.5	33	99	150	0.8	FX153K224G182GL5
530	1100	0.33	32.0	20.0	11.0	27.5	49.5	148.5	150	0.8	FX153M334G182GL5
530	1100	0.47	32.0	22.0	13.0	27.5	70.5	211.5	150	0.8	FX153M474G212GL5
530	1100	0.47	32.0	24.5	13.0	27.5	70.5	211.5	150	0.8	FX153K474G222GL5
530	1100	0.56	32.0	24.5	13.0	27.5	84	252	150	0.8	FX153K564G222GL5
530	1100	0.68	32.0	24.5	15.0	27.5	102	306	150	0.8	FX153M684G272GL5
530	1100	0.68	32.0	28.0	18.0	27.5	102	306	150	0.8	FX153K684G332GL5
530	1100	0.82	32.0	28.0	18.0	27.5	123	369	150	0.8	FX153K824G332GL5
530	1100	1	32.0	28.0	18.0	27.5	150	450	150	0.8	FX153M105G332GL5
530	1100	1.5	32.0	37.0	22.0	27.5	225	675	150	0.8	FX153K155G402GL5
530	1100	1.8	32.0	37.0	22.0	27.5	270	810	150	0.8	FX153M185G402GL5
530	1100	0.56	42.5	22.0	11.0	37.5	56	168	100	1.0	FX153K564K102KL5
530	1100	0.68	42.5	22.0	11.0	37.5	68	204	100	1.0	FX153K684K102KL5
530	1100	0.82	42.5	26.0	15.0	37.5	82	246	100	1.0	FX153K824K132KL5
530	1100	1	42.5	26.0	15.0	37.5	100	300	100	1.0	FX153M105K132KL5
530	1100	1	42.5	30.0	17.0	37.5	100	300	100	1.0	FX153K105K182KL5
530	1100	1.5	42.5	30.0	17.0	37.5	150	450	100	1.0	FX153M155K182KL5
530	1100	1.5	42.5	32.0	19.0	37.5	150	450	100	1.0	FX153K155K212KL5
530	1100	2	42.5	40.0	20.0	37.5	220	660	100	1.0	FX153K205K242KL5
760	1500	0.0047	18.0	11.0	5.0	15.0	2.35	7.05	500	0.6	FX176K472E142EL5
760	1500	0.0056	18.0	11.0	5.0	15.0	2.8	8.4	500	0.6	FX176K562E142EL5
760	1500	0.0068	18.0	11.0	5.0	15.0	3.4	10.2	500	0.6	FX176K682E142EL5
760	1500	0.0082	18.0	11.0	5.0	15.0	4.1	12.3	500	0.6	FX176K822E142EL5
760	1500	0.01	18.0	11.0	5.0	15.0	5	15	500	0.8	FX176K103E142EL5
760	1500	0.012	18.0	12.0	6.0	15.0	6	18	500	0.6	FX176K123E172EL5
760	1500	0.015	18.0	12.0	6.0	15.0	7.5	22.5	500	0.6	FX176K153E172EL5
760	1500	0.018	18.0	13.0	7.0	15.0	9	27	500	0.6	FX176K183E212EL5
760	1500	0.022	18.0	13.5	7.5	15.0	11	33	500	0.6	FX176K223E292EL5
760	1500	0.027	18.0	14.0	8.0	15.0	13.5	40.5	500	0.6	FX176K273E312EL5
760	1500	0.033	18.0	14.5	8.5	15.0	16.5	49.5	500	0.6	FX176K333E342EL5
760	1500	0.039	18.0	16.0	10.0	15.0	19.5	58.5	500	0.6	FX176K393E432EL5
760	1500	0.047	18.0	19.0	11.0	15.0	23.5	70.5	500	0.8	FX176K473E472EL5
760	1500	0.056	18.0	22.0	12.5	15.0	28	84	500	0.6	FX176K563E522EL5

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	
760	1500	0.01	26.0	15.5	6.0	22.5	3	9	300	0.6	FX176K103F142FL5
760	1500	0.012	26.0	15.5	6.0	22.5	3.6	10.8	300	0.6	FX176K123F142FL5
760	1500	0.015	26.0	15.5	6.0	22.5	4.5	13.5	300	0.6	FX176K153F142FL5
760	1500	0.018	26.0	15.5	6.0	22.5	5.4	16.2	300	0.6	FX176K183F142FL5
760	1500	0.022	26.0	15.5	6.0	22.5	6.6	19.8	300	0.6	FX176K223F142FL5
760	1500	0.027	26.0	15.5	6.0	22.5	8.1	24.3	300	0.6	FX176K273F142FL5
760	1500	0.033	26.0	15.5	6.0	22.5	9.9	29.7	300	0.8	FX176K333F142FL5
760	1500	0.047	26.0	15.5	6.0	22.5	14.1	42.3	300	0.6	FX176K473F142FL5
760	1500	0.056	26.0	16.5	7.0	22.5	16.8	50.4	300	0.6	FX176K563F172FL5
760	1500	0.068	26.0	16.5	7.0	22.5	20.4	61.2	300	0.6	FX176K683F172FL5
760	1500	0.082	26.0	17.0	8.5	22.5	24.6	73.8	300	0.6	FX176K823F202FL5
760	1500	0.1	26.0	19.0	10.0	22.5	30	90	300	0.6	FX176K104F242FL5
760	1500	0.12	26.0	19.0	10.0	22.5	36	108	300	0.6	FX176K124F242FL5
760	1500	0.15	26.0	19.0	10.0	22.5	45	135	300	0.6	FX176K154F242FL5
760	1500	0.18	26.0	20.0	11.0	22.5	54	162	300	0.8	FX176K184F262FL5
760	1500	0.22	26.0	23.0	13.0	22.5	66	198	300	0.6	FX176K224F292FL5
760	1500	0.27	26.0	25.0	15.0	22.5	81	243	300	0.6	FX176K274F362FL5
760	1500	0.33	26.0	29.5	14.5	22.5	99	297	300	0.6	FX176K334F342FL5
760	1500	0.056	32.0	18.0	9.0	22.5	16.8	50.4	300	0.6	FX176K563G152GL5
760	1500	0.068	32.0	18.0	9.0	27.5	13.6	40.8	200	0.8	FX176K683G152GL5
760	1500	0.082	32.0	18.0	9.0	27.5	16.4	49.2	200	0.8	FX176K823G152GL5
760	1500	0.1	32.0	18.0	9.0	27.5	20	60	200	0.8	FX176K104G152GL5
760	1500	0.12	32.0	18.0	9.0	27.5	24	72	200	0.8	FX176K124G152GL5
760	1500	0.15	32.0	19.0	10.0	27.5	30	90	200	0.8	FX176K154G172GL5
760	1500	0.18	32.0	20.0	11.0	27.5	36	108	200	0.8	FX176K184G182GL5
760	1500	0.22	32.0	22.0	13.0	27.5	44	132	200	0.8	FX176K224G212GL5
760	1500	0.27	32.0	24.0	14.0	27.5	54	162	200	0.8	FX176K274G252GL5
760	1500	0.33	32.0	24.5	15.0	27.5	66	198	200	0.8	FX176K334G272GL5
760	1500	0.33	32.0	28.0	14.0	27.5	66	198	200	0.8	FX176K334G262GL5
760	1500	0.39	32.0	33.0	18.0	27.5	78	234	200	0.8	FX176K394G342GL5
760	1500	0.47	32.0	33.0	18.0	27.5	94	282	200	0.8	FX176K474G342GL5
760	1500	0.56	32.0	33.0	18.0	27.5	112	336	200	0.8	FX176K564G342GL5
760	1500	0.68	32.0	37.0	22.0	27.5	136	408	200	0.8	FX176K684G402GL5
760	1500	0.33	42.5	24.0	13.0	37.5	49.5	148.5	150	1.0	FX176K334K112KL5
760	1500	0.33	42.5	26.0	12.0	37.5	49.5	148.5	150	1.0	FX176K334K652KL5
760	1500	0.39	42.5	24.0	13.0	37.5	58.5	175.5	150	1.0	FX176K394K112KL5
760	1500	0.39	42.5	26.0	12.0	37.5	58.5	175.5	150	1.0	FX176K394K652KL5
760	1500	0.47	42.5	26.0	15.0	37.5	70.5	211.5	150	1.0	FX176K474K132KL5
760	1500	0.47	42.5	28.0	14.0	37.5	70.5	211.5	150	1.0	FX176K474K662KL5
760	1500	0.56	42.5	32.0	16.0	37.5	84	252	150	1.0	FX176K564K152KL5
760	1500	0.56	42.5	28.0	19.0	37.5	84	252	150	1.0	FX176K564K202KL5
760	1500	0.68	42.5	32.0	19.0	37.5	102	306	150	1.0	FX176K684K212KL5
760	1500	0.82	42.5	28.0	19.0	37.5	123	369	150	1.0	FX176K824K202KL5
760	1500	1	42.5	32.0	19.0	37.5	150	450	150	1.0	FX176K105K212KL5
760	1500	1	42.5	37.0	22.0	37.5	150	450	150	1.0	FX176K105K272KL5
760	1500	1.2	42.5	37.0	22.0	37.5	180	540	150	1.0	FX176K125K272KL5
760	1500	1.2	42.5	40.0	20.0	37.5	180	540	150	1.0	FX176K125K242KL5
760	1500	1.5	42.5	44.0	24.0	37.5	225	675	150	1.0	FX176K155K322KL5

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	
760	1500	1.5	42.5	37.0	28.0	37.5	225	675	150	1.0	FX176K155K372KL5
760	1500	1.8	42.5	43.0	28.0	37.5	270	810	150	1.0	FX176K185K392KL5
760	1500	1.8	42.5	45.0	30.0	37.5	270	810	150	1.0	FX176K185K422KL5
760	1500	2	42.5	50.0	35.0	37.5	300	900	150	1.0	FX176K205K472KL5

General Technical Data

Application	Interference suppression \ Across-the-line (Class X1)
Dielectric	Metallized Polypropylene Film
Reference Standard	IEC 60384-14; UL 60384-14; GB/T 6346.14-2015
Climatic Category	40/110/56 IEC60068-1
Passive Flammability Class	B
Operating Temperature Range	-40°C ~ +110°C (85°C ~110°C, decreasing factor 1.25% per °C for Urms)
Protection	Solvent resistant plastic case UL94 V-0 Thermosetting resin sealing UL 94 V-0 compliant
Installation	Any position
Packaging	Packed in cardboard boxes with protection for the terminals
Storage Conditions	Storage time: ≤24months from the date marked on the label package Average relative humidity per year ≤70% RH≤85% for 30 days randomly distributed throughout the year Dew is absent Temperature: -40°C ~ +85°C
RoHS Compliant	Compliant with the restricted substance requirements of Directive 2011/65/EU
Flame Retardant Grade	Flame retardant performance accords with horizontal combustion grade HB and vertical combustion grade V-0.

Construction

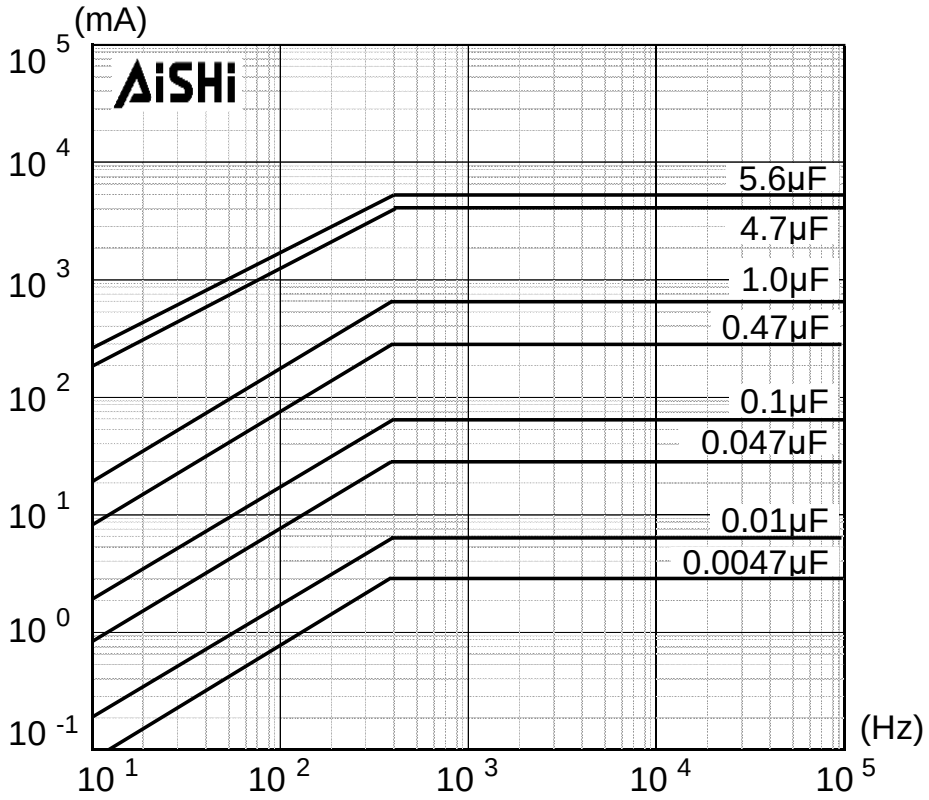
Metallized Film	OPP & Al/Zn
Metal Sprayed	Sn/Zn Alloy
Connection Electrode	Copper clad steel wire or Tinned copper wires
Plastic Case	Plastic Case (UL94V-0)
Filling	Epoxy Resin (UL94V-0)
Film Construction	Internal Series Connection 

Electrical Characteristics

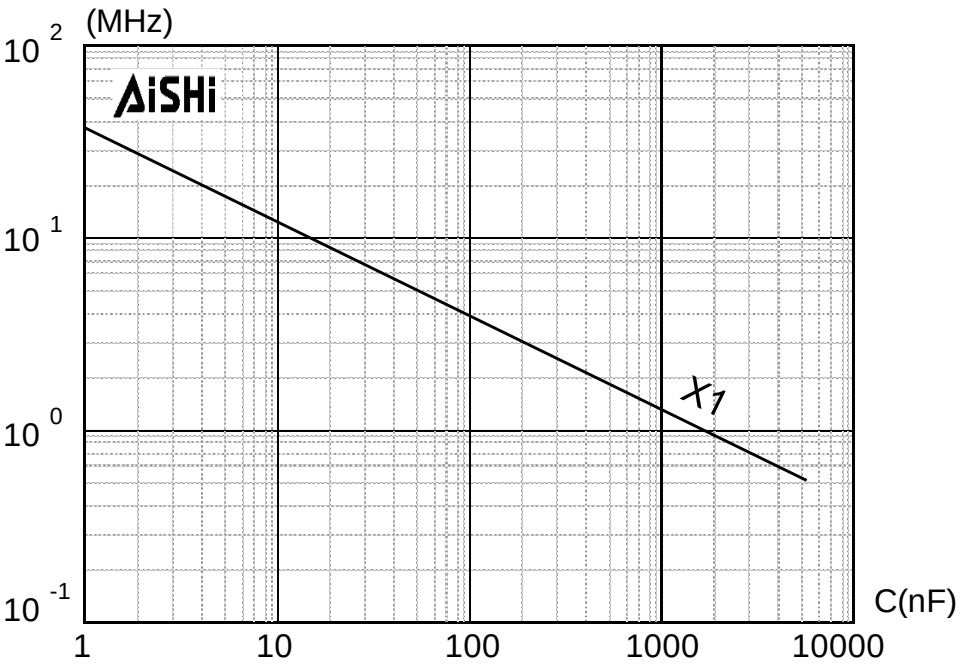
Voltage Range	350Vac, 440/480Vac, 530Vac, 760Vac 50/60Hz
Capacitance Range	0.0047μF to 5.6μF
Capacitance Tolerance	±10% or ±20% at +25°C
Capacitance	Measuring Frequency at 1kHZ Measuring Voltage:1±0.2V
Standard Atmospheric Conditions for Static Test	**Ambient temperature** 15°C to 35°C (If there is any doubt on the results, the measurements shall be made at +20 +/- 5°C) **Relative humidity** 45% to 75% (If there is any doubt on the results, the measurements shall be made at 60% to 70 %.) **Air pressure** 86 kPa to 106 kPa.
Voltage Between Terminals U_{TT}	DC Voltage: 4.3xVR for 60 seconds or $\sqrt{2}(2U_R + 1000Vac)$ VDC for 2 seconds, charge current must be 1A max. Withstanding (DC) voltage (cut off current 10mA), rise time 100V/S. AC Voltage: ($2U_R$ + 1000VAC) for 2 seconds
Voltage Between Terminals and Case U_{TC}	$2U_R$ + 1500Vac, 60s (at +20+/-2°C)
Dielectric Dissipation Factor Tgδ 0	$\leq 2\times10^{-4}$
Dissipation Factor	$\leq 10 \times 10^{-4}$ C < 0.47μF $\leq 20 \times 10^{-4}$ 0.47μF ≤ C ≤ 1.0μF $\leq 30 \times 10^{-4}$ C > 1.0μF
Insulation Resistance	R between leads, for C ≤ 0.33 μF at 100 V; 1 min > 15 000 MΩ RC between leads, for C > 0.33 μF at 100 V; 1 min > 5000 MΩ*μF
Hot-Spot	≤85°C
Life Expectancy	100 000hours (UR, Θhotspot=85°C)
Failure Rate	100 Fit
Max. Altitude	2000 m

Characteristics Curve

Maximum Current (I_{rms}) Vs Frequency



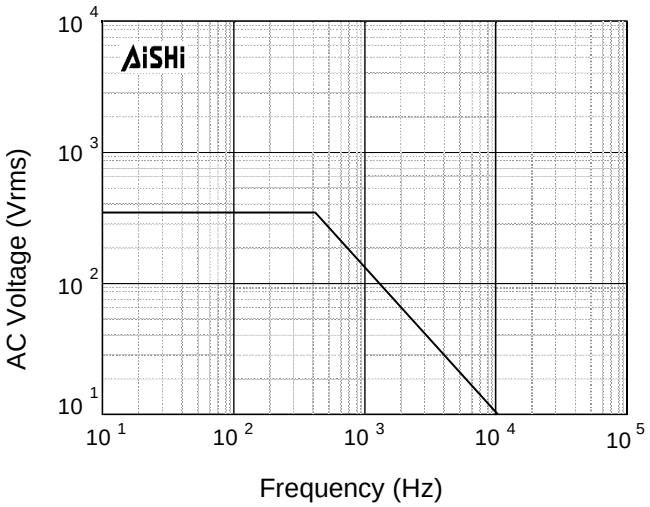
Resonant VS Capacitance



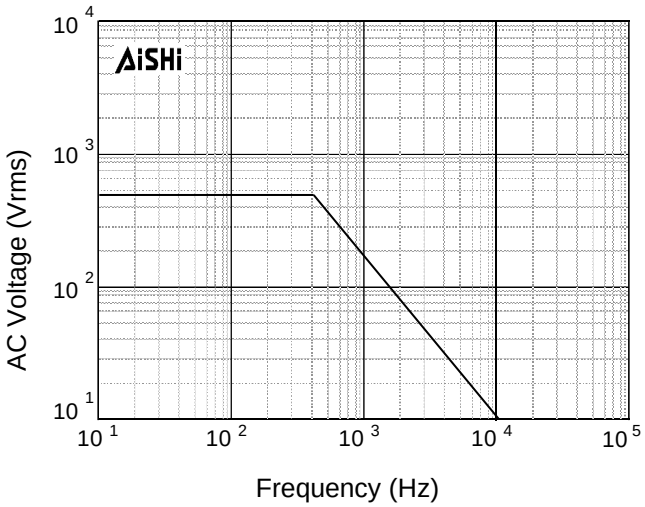
Characteristics Curve

Maximum Voltage (V_{rms}) Versus Frequency

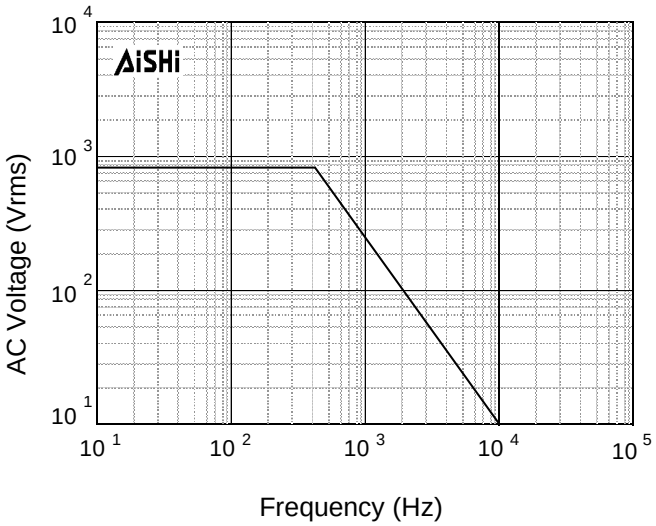
350Vac



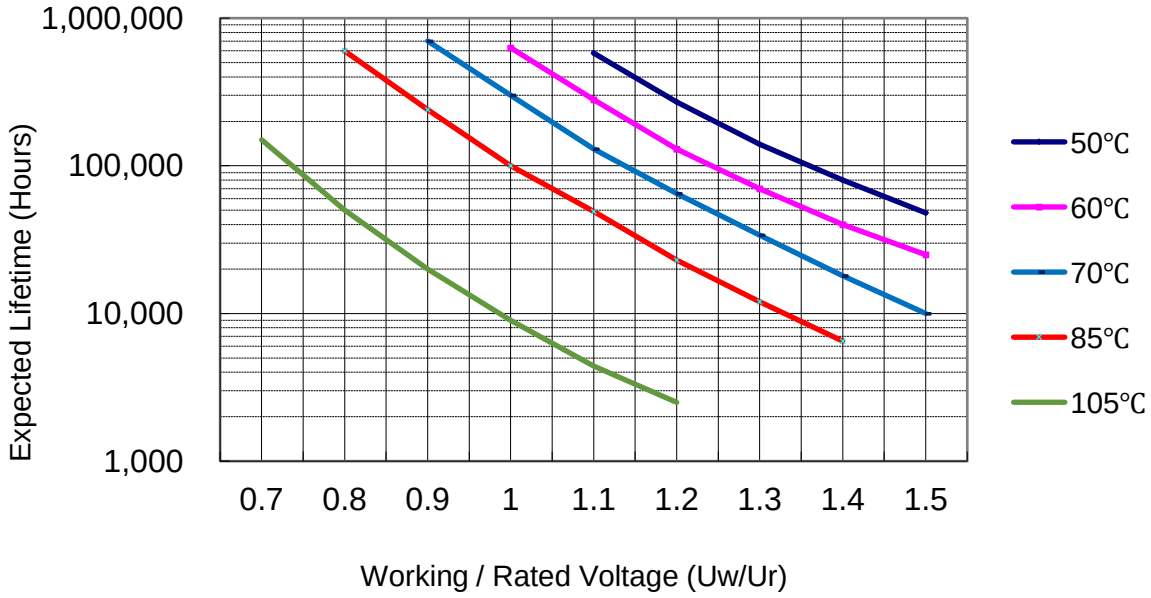
440/480/530Vac



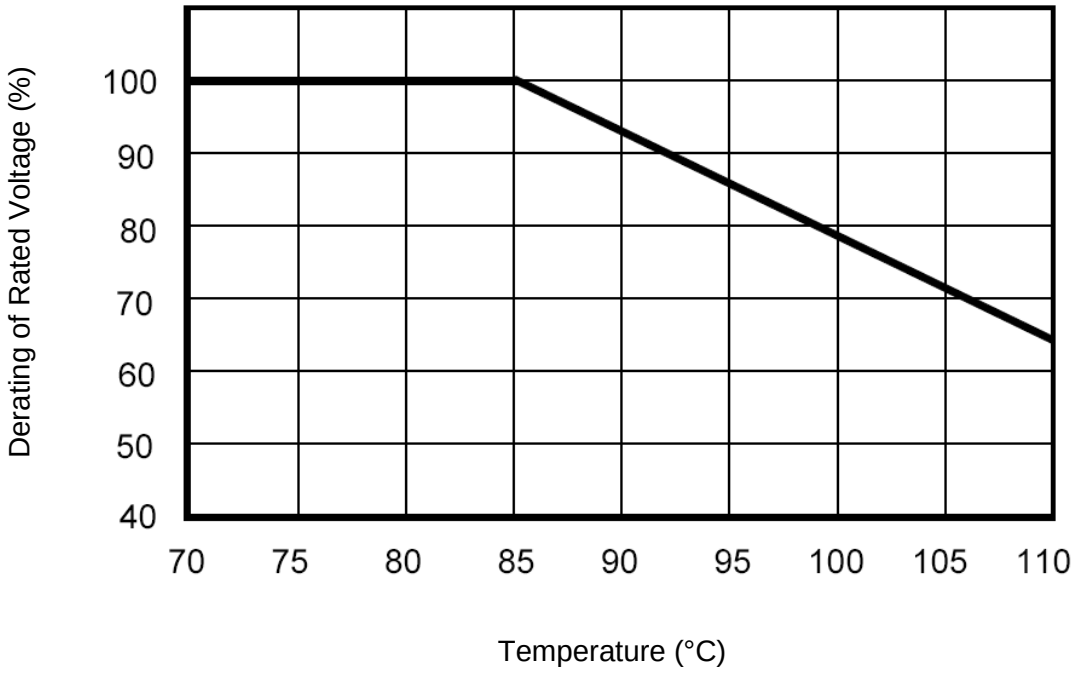
760Vac



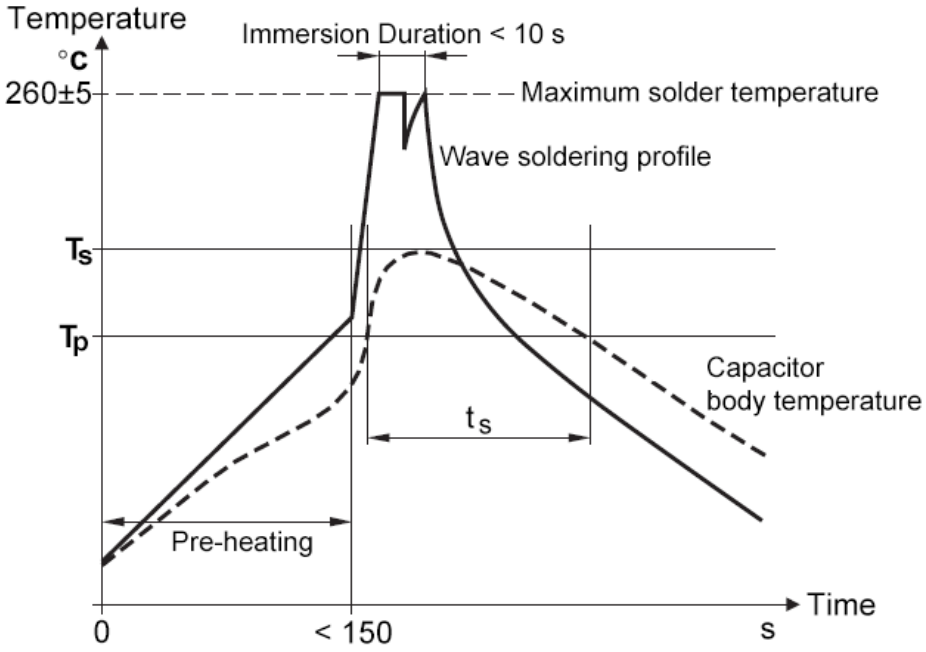
Expected Life Curve



Derating of Rated Voltage Vs Temperature



Wave Soldering Recommendations

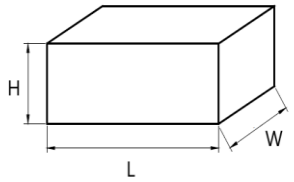


Ts: Capacitor body maximum temperature at wave soldering
Tp: Capacitor body maximum temperature at pre-heating

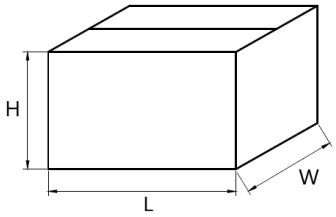
Polypropylene Capacitors	Polyester Capacitors
During pre-heating: Tp≤110°C During soldering: Ts ≤120°C, ts≤60	During pre-heating: Tp≤130°C During soldering: Ts≤160°C, ts≤60s

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



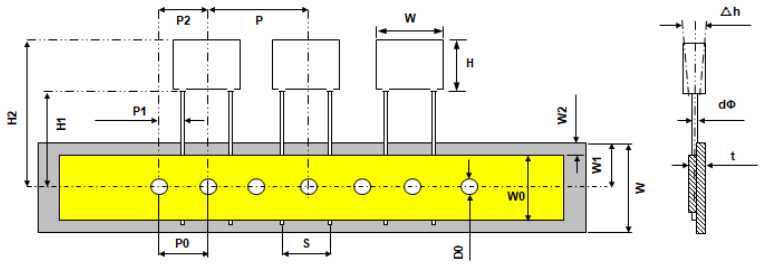
Packaging Quantity

P	Code	W	H	T	Long Leads	Short Leads	Ammo
10.0	C13	13.0	11.0	5.0	1200	1426	600
	C16	13.0	12.0	6.0	1200	1173	500
	C26	13.0	14.0	8.0	1200	874	370
15.0	E17	18.0	12.0	6.0	800	867	500
	E21	18.0	13.0	7.0	800	748	420
	E34	18.0	14.5	8.5	600	612	350
	E43	18.0	16.0	10.0	600	527	300
	E47	18.0	19.0	11.0	600	476	270
	E52	18.0	22.0	12.5	600	408	240
22.5	F17	26.0	16.5	7.0	600	528	252
	F20	26.0	17.0	8.5	600	432	210
	F24	26.0	19.0	10.0	400	372	180
	F26	26.0	20.0	11.0	400	336	162
	F27	26.0	22.0	12.0	400	300	150
	F29	26.0	23.0	13.0	400	276	138
	F32	26.0	24.0	14.0	400	264	126
	F36	26.0	25.0	15.0	400	240	120
27.5	G18	32.0	20.0	11.0	200	252	162
	G21	32.0	22.0	13.0	200	207	138
	G22	32.0	24.5	13.0	200	207	138
	G26	32.0	28.0	14.0	200	198	126
	G34	32.0	33.0	18.0	100	153	96
	G40	32.0	37.0	22.0	100	126	78
37.5	K21	42.5	32.0	19.0		112	
	K32	42.5	44.0	24.0		91	
	K42	42.5	45.0	30.0		70	
52.5	M16	57.5	45.0	30.0		50	

Lead Taping Information

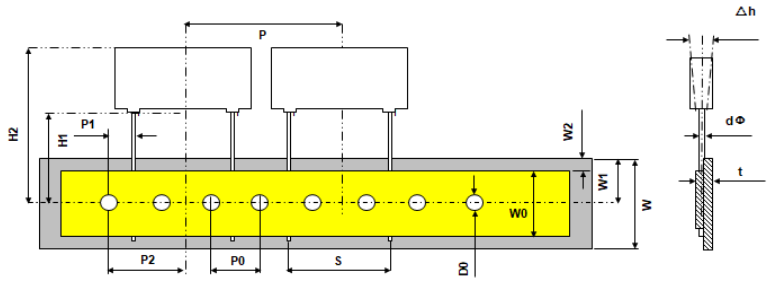
Taping Style: Straight leads

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	△h	0.0	0.0	0.0	0.0	±2.0
Tape Thickness	t	0.7	0.7	0.7	0.7	±0.2

Cautions and Warnings

- Don't exceed the upper category temperature.
- For longtime storage, maximum relative humidity 80%, no dew allowed on the capacitor.
- Do not use or store capacitor in corrosive atmosphere, in the dusty environment's regular maintenance and cleaning especially of the terminals is required to avoid conductive path between terminal / or terminal and ground.
- Don't apply any mechanical stress to the capacitor terminals, and avoid any compressive, tensile or flexural stress.
- Don't move the capacitor after fixed to the PC board, and don't pick up the PC bord by the fixed capacitor.
- Don't place the capacitor on a PC board whose holes pacse differs from the specified space.
- Avoid overload of the capacitors
- Do not have unlimited service life expectancy, the max service life expectancy may vary depending on the application the capacitor is used in.

Disclaimer

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