Metallized Polypropylene Film EMI Suppression Capacitors
FXJ Series - Class X1 350VAC ~ 530VAC (Automotive Grade, THB 2000H)

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 condition and qualify in accordance to AEC-Q200D requirement.

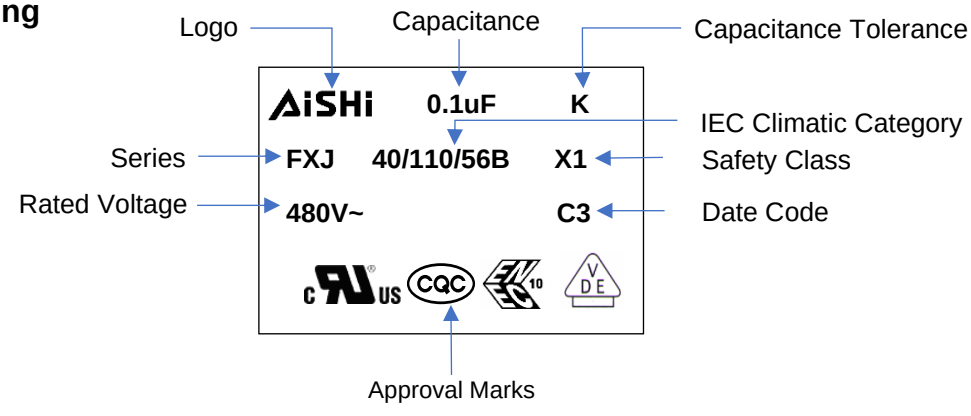
Applications
For use as an electromagnetic interference (EMI) suppression filter in across-the-line applications that require X1 safety classification. Suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.

Features
- High stability of capacitance
- High operating temperature: 110°C
- Self-healing property
- Over voltage stress withstanding
- Flame-retardant plastic case and resin
- Suitable for harsh environmental conditions
- THB 2000H - 85°C 85%RH, 2000 Hours, U_{RAC}
- Automotive Grade (AEC-Q200D)

Approvals

Marking	Standard	File Number
c UL us	UL 60384-14 CAN/CSA-E60384-14	E500538
10 VDE	IEC 60384-14:2013 IEC 60384-14:2013/AMD1:2016	40052137
CQC	IEC 60384-14:2013+AMD1:2016 CQC11-471112-2015	CQC20001281016 (350~480Vac) CQC20001281018 (530~760Vac)

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, THB Type, AEC-Q200D, Metallized PP Film	35=350 44=440 48=480 53=530	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

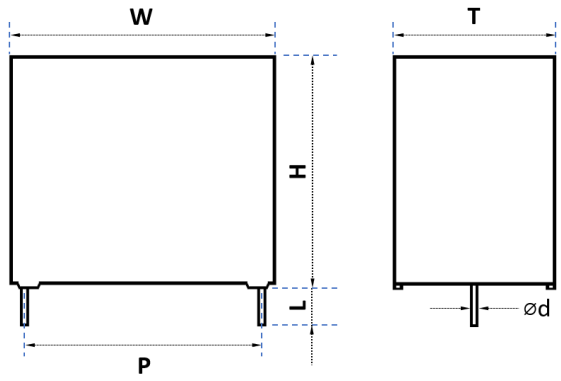
Terminal Code

Digit One (Lead/Terminal Type)		Digit Two (Lead Space)		Digit Three (Lead Ipsilateral)	
2 leads for long	L	15.0mm	E	N/A	L
2 leads for straight cut	2	22.5mm	F		
2 leads for forming cut	E	27.5mm	G		
Taping	T	37.5mm	K		
Taping Straight	V	N/A	N		

Lead Length Code

Lead Length	
20mm min	L
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
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
E39	18	0.5	18	0.5	9	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
E52	18	0.5	22	0.5	12.5	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
F30	26	0.5	24.5	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
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
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

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	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	H	T	P					
		µF	mm	mm	mm	mm	A	A	V/us	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	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	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	FXJ53K333E292EL5
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

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; AEC-Q200D
Climatic Category	40/110/56 IEC60068-1
Passive Flammability Class	B
Operating Temperature Range	-40°C ~ +110°C (85°C ~110°C, decreasing factor 1.35% 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

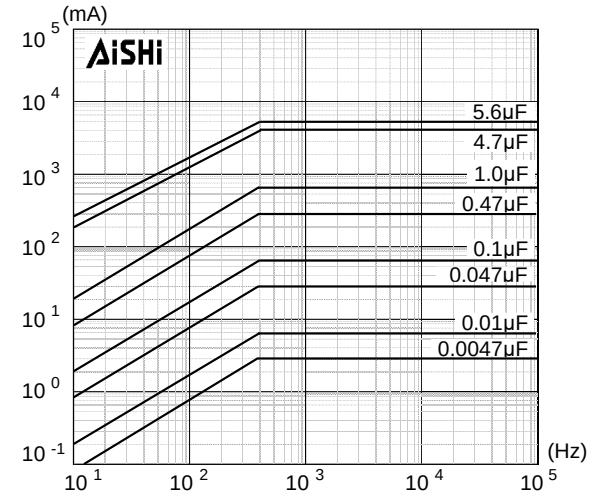
Metallized Film	OPP & Al/Zn
Metal Sprayed	Sn/Zn Alloy
Connection Electrode	Copper clad steel wire or Tinned copper wires
Plastic Case	Plastic Case (UL94V-0)
Filling	Epoxy Resin (UL94V-0)
Film Construction	Internal Series Connection 

Electrical Characteristics

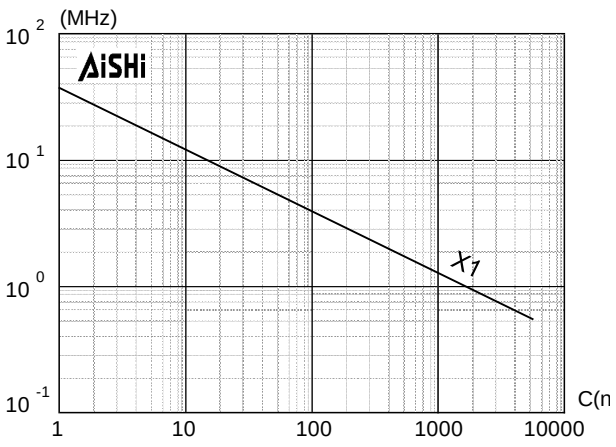
Voltage Range	350Vac, 480Vac, 530Vac at 50/60Hz
Capacitance Range	0.0068μF to 3.3μF
Capacitance Tolerance	±10% or ±20% at +25°C
Capacitance	Measuring Frequency at 1kHZ Measuring Voltage:1±0.2V
Standard Atmospheric Conditions for Static Test	**Ambient temperature** 15°C to 35°C (If there is any doubt 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



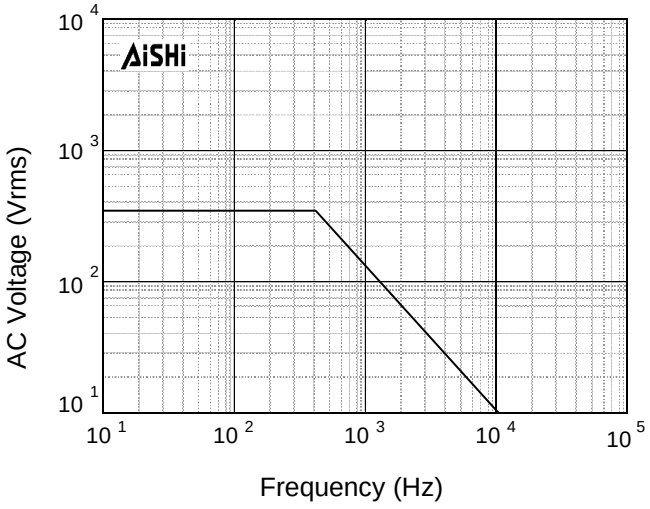
Resonant VS Capacitance



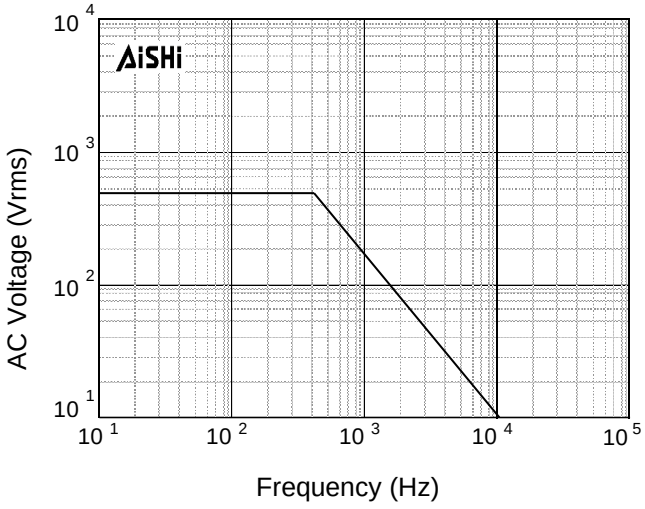
Characteristics Curve

Maximum Voltage (V_{rms}) Versus Frequency

350Vac



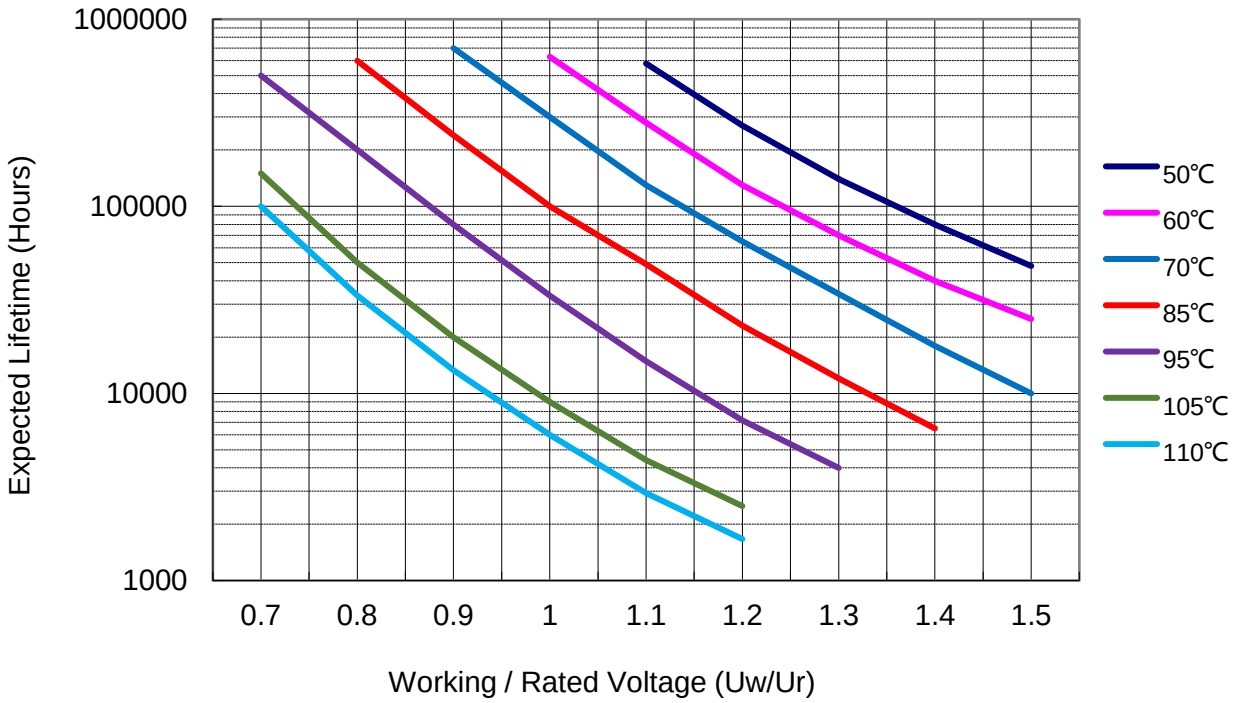
480/530Vac



Bias Humidity Test

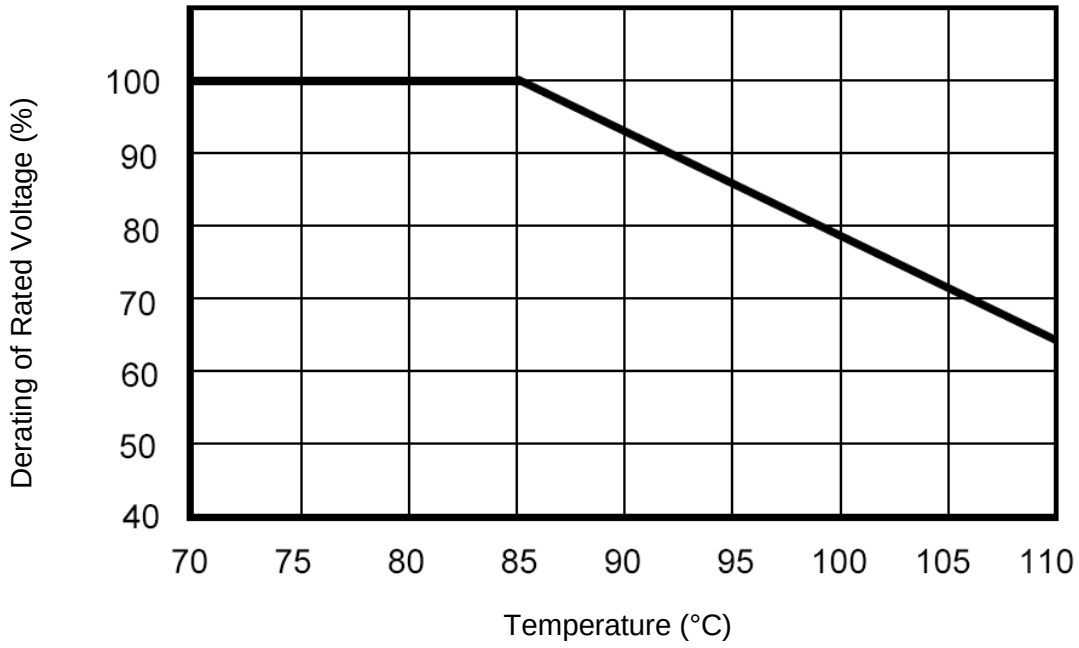
High Temperature High Humidity loading	**Test Condition 1:** Reference: MIL-STD-202 Method 103 Test Temperature: +60+/-2°C Test Humidity: 95% R.H. Loading Voltage: Rated Voltage Test Duration: 1000 +24/-0 hours measurement at 24±4hours after test conclusion **Performance:** Capacitance Change Rate (△C/C): ≤±5% DF change (△tgδ): ≤240*10^{-4} at 10 KHz (C ≤ 1 μF) DF change (△tgδ): ≤150*10^{-4} at 1 KHz. (C > 1 μF) Insulation Resistance: ≥50% of initial limit **Test Condition 2:** Test Temperature: +85 +/-2°C Test Humidity: 85% R.H. Loading Voltage: Rated Voltage Test Duration: 2000 +24/-0 hours measurement at 24±4hours after test conclusion **Performance:** Capacitance Change Rate (△C/C): ≤±10% Maximum permissible increase of tan δ between initial and final measurement: 0.024 for C_N ≤ 1 μF 0.015 for C_N > 1 μF Insulation Resistance: ≥50% of initial limit

Expected Life Curve

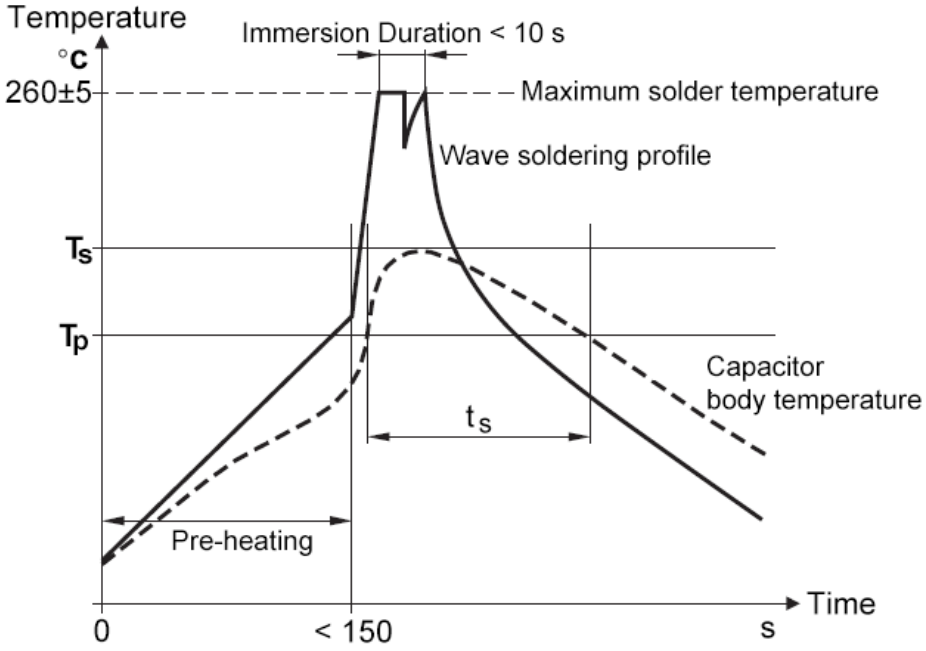


Derating of Rated Voltage Vs Temperature

(85°C ~110°C, decreasing factor 1.35% per °C for Urms)



Wave Soldering Recommendations

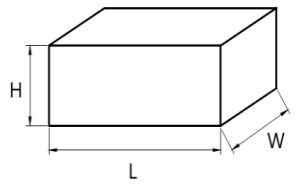


Ts: Capacitor body maximum temperature at wave soldering
Tp: Capacitor body maximum temperature at pre-heating

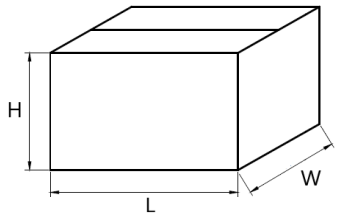
Polypropylene Capacitors	Polyester Capacitors
During pre-heating: Tp≤110°C During soldering: Ts ≤120°C, ts≤60	During pre-heating: Tp≤130°C During soldering: Ts≤160°C, ts≤60s

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



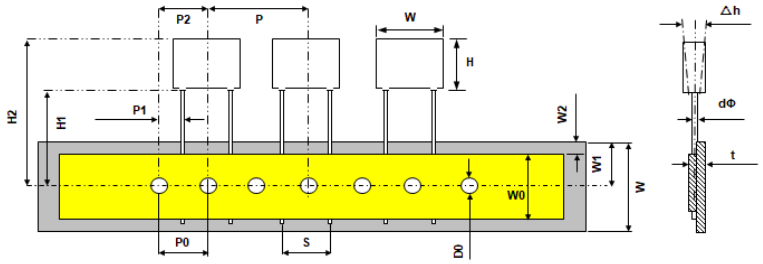
Packaging Quantity

Pitch	Size	Dimension			Packaging Quantity		
	Code	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	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
	F30	26	24.5	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	
	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	
	G33	32	28	18	170	170	
	G34	32	33	18	170	170	
	G40	32	37	22	140	140	

Lead Taping Information

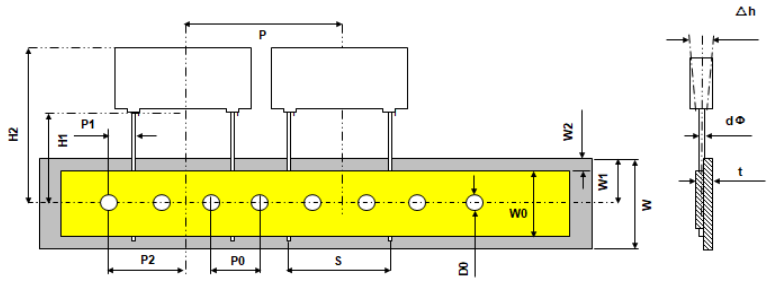
Taping Style: Straight leads

Lead spacing: 10 - 15mm



Quantity: 10pcs / line

Lead spacing: 22.5mm



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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