

Overview

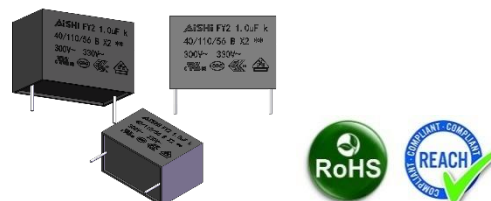
The FY2 series is constructed of metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirement of UL94V-0.

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 CAN/CSA-E60384-14	E500538
	IEC 60384-14:2013 IEC 60384-14:2013/AMD1:2016	40052687
	IEC 60384-14:2013+AMD1:2016 CQC11-471112-2015	CQC20001280148

General Technical Data

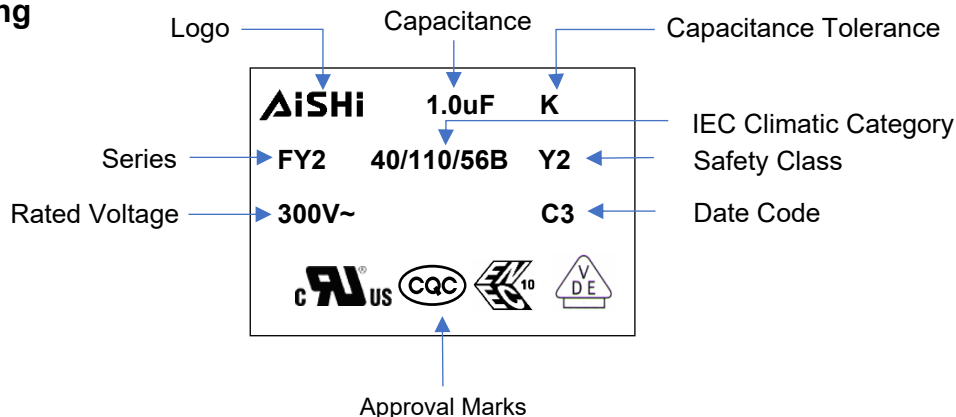
Dielectric	Metalized Polypropylene Film
Voltage Range	300Vac
Capacitance Range	0.001μF to 1.0μF
Capacitance Tolerance	±10% or ±20% at +25°C
Operating Temperature Range	-40°C ~ +110°C (85°C ~110°C, decreasing factor 1.35% per °C for Urms)
Climatic Category	40/110/56 IEC60068-1
Dissipation Factor	0.0020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

Metallized Polypropylene Film EMI Suppression Capacitors

FY2 Series - Class Y2 300VAC



Marking



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, Metallized PP Film	30=300Vac	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

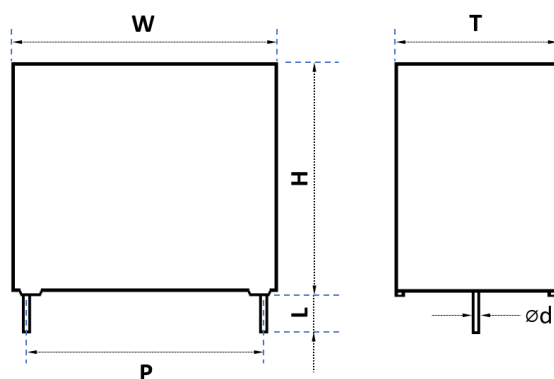
Terminal Code

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	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)



2 pins

Size Code Table (mm)

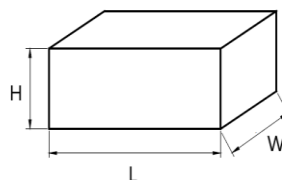
Size Code	Dimension						Pitch		Lead Wire	
	W	Tolerance	H	Tolerance	T	Tolerance	P	Tolerance	Ød	Tolerance
C11	13	0.5	9	0.5	4	0.5	10	0.5	0.6	0.05
C13	13	0.5	11	0.5	5	0.5	10	0.5	0.6	0.05
C16	13	0.5	12	0.5	6	0.5	10	0.5	0.6	0.05
E14	18	0.5	11	0.5	5	0.5	15	0.5	0.6	0.05
E17	18	0.5	12	0.5	6	0.5	15	0.5	0.6	0.05
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

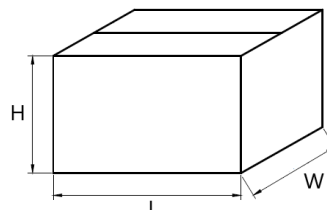
Vac	Vdc	Cap Value μF	Dimensions				Peak Current A	Surge Current A	dv/dt V/us	Lead Wire mm	Part Number
			W mm	H mm	T mm	P mm					
300	1500	0.001	13	9	4	10	0.8	2.4	800	0.6	FY230K102C112CL5
300	1500	0.0015	13	9	4	10	1.2	3.6	800	0.6	FY230K152C112CL5
300	1500	0.0022	13	9	4	10	1.76	5.28	800	0.6	FY230K222C112CL5
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	