

Metallized Polypropylene Film Capacitor(Axial Lead) High Frequency/Switching Application

FPW

订购基本规格

EXPLANATION OF ARTICLE CODE

FPW -	105	K	2G	A	55	L	L
①	②	③	④	⑤	⑥	⑦	⑧

① Capacitor Type

TYPE	FPW
CODE	FPW-

② Rated Capacitance (EIA Code)

The rated Capacitance value of the product is indicated with three digits. The first two digits indicate the two most significant digits of the capacitance value, and the third digit gives the number of following zeroes. This gives the capacitance value expressed in picofarads.

Examples:

105	=	1,000,000pF	=	1,000nF	=	1uF
106	=	10,000,000pF	=	10,000nF	=	10uF

③ Capacitance Tolerance



TOLERANCE	±5%	±10%	±20%
CODE	J	K	M

④ Rated Voltage

Code for DC Voltage: (expressed in one digit & one letter code)

VOLTAGE	250V	400V	500V	600V	630V	700V	800V	850V
CODE	2E	2G	2H	2R	2J	2S	2K	2T

⑤ Lead Configuration

CODE	A	
LEAD TYPE		

⑥ Length

Unit: mm

Lead Pitch	29.0	34.0	46.0	55.0	59.0
CODE	29	34	46	55	59

⑦ Lead Forming Pitch

Lead Pitch	N/A
CODE	L

⑧ Lead Length

Lead Pitch	N/A
CODE	L

Metallized Polypropylene Film Capacitor(Axial Lead) High Frequency/Switching Application

FPW

High current switching capacitor consists of wound metallized polypropylene film, outer wrapped by polyester film tape and end sealed by epoxy resin. They are suitable for industrial and motor speed controls, switching mode power supplies, resonant circuits and induction heaters



APPLICATIONS

Motor Speed Controls

Switching Mode Power Supplies

Resonant Circuits

Induction Heaters

FEATURES

Low losses and high ripple current.

Self- Healing.

High contact reliability

Flame retardant plastic case and epoxy resin.

SPECIFICATIONS

Operating Temperature: $-40^{\circ}\text{C} - +85^{\circ}\text{C}$

Capacitance range: $0.1\mu\text{F} - 60\mu\text{F}$

Capacitance Tolerance: $\pm 5\%(\text{J}), \pm 10\%(\text{K})$ at 1KHz

Rated Voltage: 250VDC - 850VDC

Dissipation Factor:
(1 kHz, 25°C)
 $C \leq 5\mu\text{F}$ 0.06% max
 $5\mu\text{F} < C \leq 30\mu\text{F}$ 0.1% max
 $C > 30\mu\text{F}$ 0.15% max

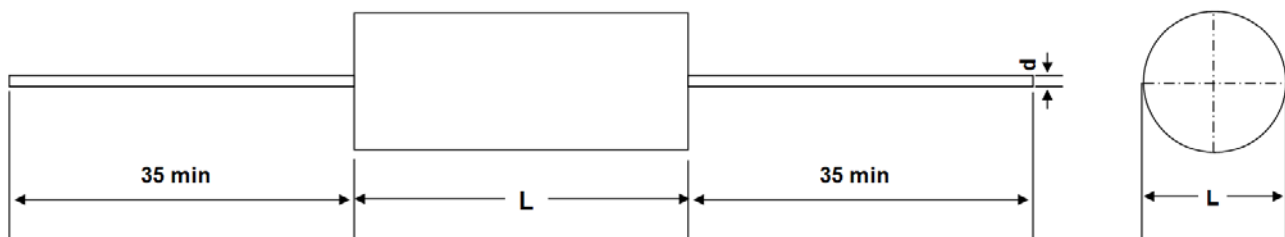
Dielectric Withstand: 2.0 x rated voltage for 10 seconds (terminal to terminal)

Insulation Resistance: $>3,000 \text{ M}\Omega \cdot \mu\text{F}/\text{C}$ after 1 minutes of electrification @ 100 Vdc & 25°C

Terminals to Case: 3.0 KV 50Hz for 60 sec. @ 25°C

Life Expectancy: 100,000 hours at U_r and 70°C

Lead Terminations: Tinned copper leads (RoHS compliant)



Metallized Polypropylene Film Capacitor(Axial Lead) High Frequency/Switching Application

FPW

■ DIMENSIONS / 产品尺寸 :

SIZE R.V. CAP(μF)	250 V D C						
	OD (mm)	L (mm)	d (mm)	dv/dt (v/us)	I peak (A)	Irms @100KHz +25°C (A)	ESR @100KHz +25°C mΩ
1.0	11.0	29.0	0.8	50	50	4.5	7.2
1.5	13.0	29.0	0.8	50	75	5.5	5.8
2.0	12.5	34.0	0.8	40	80	6.0	4.9
2.0	14.5	29.0	1.0	50	100	5.5	5.7
2.2	13.0	34.0	0.8	40	88	6.0	5.4
2.2	15.0	29.0	1.0	50	110	6.5	4.8
2.5	14.0	34.0	0.8	40	100	7.0	5.1
2.5	15.5	29.0	1.0	50	125	7.0	4.5
3.0	15.0	34.0	1.0	40	120	7.0	4.6
3.0	17.0	29.0	1.0	50	150	7.5	4.2
3.3	15.5	34.0	1.0	40	132	8.0	4.2
4.0	17.0	34.0	1.0	40	160	9.0	3.6
4.7	18.0	34.0	1.0	40	188	10.0	3.3
5.0	18.5	34.0	1.0	40	200	10.0	3.2
6.8	21.0	34.0	1.0	40	272	10.5	2.9
10	24.0	34.0	1.2	40	400	10.5	2.4
10	21.5	46.0	1.0	25	250	10.5	3.1
15	25.5	46.0	1.2	25	375	14.0	2.6
20	22.0	29.0	1.0	25	500	14.0	5.0
22	30.5	46.0	1.2	25	550	14.0	4.7
25	32.0	46.0	1.2	25	625	14.0	4.4
30	29.5	59.0	1.2	15	450	14.0	5.3
30	31.0	55.0	1.2	20	600	14.0	4.5
33	31.0	59.0	1.2	15	495	14.0	5.0
33	32.5	55.0	1.2	20	660	14.0	4.3
40	33.5	59.0	1.2	15	600	14.0	4.5
40	36.0	55.0	1.2	20	800	14.0	3.9
50	37.0	59.0	1.2	15	750	14.0	3.9
50	40.0	55.0	1.2	20	1000	14.0	3.5
60	40.0	59.0	1.2	15	900	14.0	3.5

Metallized Polypropylene Film Capacitor(Axial Lead) High Frequency/Switching Application

FPW

■ DIMENSIONS / 产品尺寸 :

SIZE R.V. CAP(μF)	330 V D C						
	OD (mm)	L (mm)	d (mm)	dv/dt (v/us)	I peak (A)	I rms @100KHz +25°C (A)	ESR @100KHz +25°C mΩ
0.68	11.0	29.0	0.8	60	40.8	4.5	8.7
1.0	12.5	29.0	0.8	60	60	5.5	6.6
1.5	13.5	34.0	0.8	45	67.5	6.0	6.0
1.5	15.0	29.0	1.0	60	90	6.5	5.3
2.0	15.0	34.0	1.0	45	90	7.0	4.5
2.0	16.5	29.0	1.0	60	120	7.5	4.5
2.2	15.5	34.0	1.0	45	99	7.5	5.1
2.2	17.5	29.0	1.0	60	132	8.0	4.1
2.5	16.5	34.0	1.0	45	112.5	8.0	4.8
3.0	18.5	34.0	1.0	45	135	9.0	4.2
3.3	19.0	34.0	1.0	45	148.5	9.0	4.1
4.0	20.5	34.0	1.0	45	180	10.5	3.6
4.7	19.0	46.0	1.0	30	141	10.5	4.0
4.7	22.0	34.0	1.0	45	211.5	10.5	3.1
5.0	19.5	46.0	1.0	30	150	10.5	3.9
5.0	22.5	34.0	1.0	45	225	10.5	3.0
6.8	22.0	46.0	1.0	30	204	10.5	3.4
10	26.0	46.0	1.2	30	300	11.0	6.7
15	26.5	59.0	1.2	20	300	12.0	6.8
15	28.0	55.0	1.2	25	375	12.5	6.0
15	31.0	46.0	1.2	30	450	13.0	5.4
20	30.0	59.0	1.2	20	400	13.5	5.8
20	31.5	55.0	1.2	25	500	14.0	5.1
22	31.0	59.0	1.2	20	440	14.0	5.4
22	33.0	55.0	1.2	25	550	14.0	4.8
25	33.0	59.0	1.2	20	500	14.0	5.0
25	35.0	55.0	1.2	25	625	14.0	4.5
30	36.0	59.0	1.2	20	600	14.0	4.5
30	38.0	55.0	1.2	25	750	14.0	4.1
33	37.5	59.0	1.2	20	660	14.0	4.3
33	39.5	55.0	1.2	25	825	14.0	3.9
35	38.5	59.0	1.2	20	700	14.0	4.2
35	41.5	55.0	1.2	25	875	14.0	3.8
40	41.0	59.0	1.2	20	800	14.0	3.9

Metallized Polypropylene Film Capacitor(Axial Lead) High Frequency/Switching Application

FPW

■ DIMENSIONS / 产品尺寸 :

SIZE R.V. CAP(μF)	400 V D C						
	OD (mm)	L (mm)	d (mm)	dv/dt (v/us)	I peak (A)	Irms @100KHz +25°C (A)	ESR @100KHz +25°C mΩ
0.47	11.0	29.0	0.8	75	35.25	4.0	8.2
0.68	12.0	34.0	0.8	55	37.4	5.0	8.5
0.68	13.0	29.0	0.8	75	51	5.5	6.7
1.0	13.0	34.0	0.8	55	55	6.0	6.4
1.0	15.0	29.0	1.0	75	75	6.5	5.5
1.5	15.5	34.0	1.0	55	82.5	7.0	5.3
1.5	17.5	29.0	1.0	75	112.5	7.5	4.5
2.0	17.5	34.0	1.0	55	110	9.0	4.4
2.2	18.5	34.0	1.0	55	121	9.0	4.2
2.5	19.0	34.0	1.0	55	137.5	9.5	4.0
3.0	21.0	34.0	1.0	55	165	10.5	3.6
3.3	19.0	46.0	1.0	40	132	10.5	4.1
3.3	22.0	34.0	1.0	55	181.5	10.5	3.5
4.0	20.5	46.0	1.0	40	160	10.5	3.7
4.0	24.0	34.0	1.2	55	220	10.5	3.1
4.7	22.0	46.0	1.0	40	188	9.5	7.6
5.0	22.5	46.0	1.0	40	200	10.0	7.4
6.8	26.0	46.0	1.2	40	272	11.0	6.4
10	26.0	59.0	1.2	25	250	11	7.1
10	27.0	55.0	1.2	30	300	12.0	6.3
10	31.0	46.	1.2	40	400	13.0	5.4
15	33.0	55.0	1.2	30	450	14.0	5.0
15	31.0	59.0	1.2	25	375	14.0	5.6
20	35.0	59.0	1.2	25	500	14.0	4.7
20	37.0	55.0	1.2	30	600	14.0	4.3
22	37.0	59.0	1.2	25	550	14.0	4.5
22	39.0	55.0	1.2	30	660	14.0	4.1
25	39.0	59.0	1.2	25	625	14.0	4.2
25	41.5	55.0	1.2	30	750	14.0	3.8

Metallized Polypropylene Film Capacitor(Axial Lead) High Frequency/Switching Application

FPW

■ DIMENSIONS / 产品尺寸 :

SIZE R.V. CAP(μF)	600 V D C						
	OD (mm)	L (mm)	d (mm)	dv/dt (v/us)	I peak (A)	I _{rms} @100KHz +25°C (A)	ESR @100KHz +25°C mΩ
0.33	12.0	29.0	0.8	95	31.35	4.0	9.0
0.47	12.5	34.0	0.8	75	35.25	5.0	8.9
0.47	13.5	29.0	0.8	95	44.65	5.0	7.9
0.68	14.0	34.0	0.8	75	51	6.0	7.4
0.68	16.0	29.0	0.8	95	64.6	6.0	6.5
1	17.5	34.0	1.0	75	75	8.0	5.8
1.5	20.0	34.0	1.0	75	112.5	9.0	4.7
2	24.5	46.0	1.2	70	140	10.0	4.5
2	23.0	34.0	0.8	75	150	10.5	3.9
2.2	21.0	46.0	1.0	55	121	10.0	4.6
2.2	24.0	34.0	1.0	75	165	10.5	3.6
2.5	22.0	46.0	1.0	55	137.5	10.5	4.4
3	24.0	46.0	1.0	55	165	10.5	4.0
3.3	25.0	46.0	1.2	55	181.5	10.5	3.8
4	27.0	46.0	1.2	55	220	13.5	3.4
4.7	24.5	59.0	1.2	40	188	11.0	8.6
4.7	26.5	55.0	1.2	50	235	11.5	7.7
4.7	29.0	46.0	1.2	55	258.5	12.0	6.4
5	25.0	59.0	1.2	40	200	11.5	8.3
5	27.0	55.0	1.2	50	250	12.0	7.4
5	29.5	46.0	1.2	55	275	12.5	6.3
6.8	28.5	59.0	1.2	40	272	12.0	7.3
6.8	30.0	55.0	1.2	50	340	12.5	6.5
10	33.5	59.0	1.2	40	400	14.0	6.1
10	35.0	55.0	1.2	50	500	14.0	5.4
12.5	37.5	59.0	1.2	40	500	14.0	5.5
12.5	40.5	55.0	1.2	50	625	14.0	4.9
15	39.0	57.0	1.2	40	600	14.0	5.1
15	41.5	59.0	1.2	40	600	14.0	5.1

Metallized Polypropylene Film Capacitor(Axial Lead) High Frequency/Switching Application

FPW

■ DIMENSIONS / 产品尺寸 :

SIZE R.V. CAP(μF)	700 V D C						
	OD (mm)	L (mm)	d (mm)	dv/dt (v/us)	I peak (A)	I _{rms} @100KHz +25°C (A)	ESR @100KHz +25°C mΩ
0.22	11.5	34.0	0.8	105	23.1	4.0	11.0
0.22	12.5	29.0	0.8	135	29.7	3.5	10.2
0.33	13.5	34.0	0.8	105	34.65	5.0	8.9
0.33	15.0	29.0	1.0	135	44.55	5.0	8.1
0.47	15.5	34.0	1.0	105	49.35	6.5	7.3
0.47	17.0	29.0	1.0	135	63.45	6.5	6.6
0.68	17.5	34.0	1.0	105	71.4	8.0	5.7
1.0	18.0	46.0	1.2	70	70	9.0	6.3
1.0	21.5	34.0	1.2	150	150	10.0	4.3
1.2	20.0	46.0	1.2	70	84	9.0	6.0
1.2	24.0	34.0	1.2	105	126	10.5	3.7
1.5	21.5	46.0	1.2	70	105	10.5	5.3
2.0	22.5	46.0	1.2	70	140	12.0	4.6
2.2	25.5	46.0	1.2	70	154	12.5	4.3
2.5	27.0	46.0	1.2	70	175	13.5	4.0
3.0	27.0	44.0	1.2	70	210	12.0	6.1
3.3	30.5	46.0	1.2	70	231	12.0	5.9
4.0	33.5	46.0	1.2	70	280	13.5	5.4
4.0	27.5	59.0	1.2	45	180	12.0	7.7
4.7	29.5	59.0	1.2	45	211.5	12.0	7.0
4.7	31.0	55.0	1.2	60	282	13.0	6.1
5.0	30.5	59.0	1.2	45	225	12.5	6.6
5.0	32.0	55.0	1.2	60	300	13.5	5.8
6.8	35.0	59.0	1.2	45	306	14.0	5.8
6.8	37.0	55.0	1.2	60	408	14.0	5.1
8.2	38.0	59.0	1.2	45	369	14.0	5.3
8.2	41.0	55.0	1.2	60	492	14.0	4.6
10	41.5	59.0	1.2	45	450	14.0	4.9

Metallized Polypropylene Film Capacitor(Axial Lead) High Frequency/Switching Application

FPW

■ DIMENSIONS / 产品尺寸：

SIZE R.V. CAP(μF)	850 V D C						
	OD (mm)	L (mm)	d (mm)	dv/dt (v/us)	I peak (A)	I _{rms} @100KHz +25°C (A)	ESR @100KHz +25°C mΩ
0.1	11.5	29.0	0.8	375	37.5	3.5	12.9
0.15	12.0	34.0	0.8	300	45	4.5	10.8
0.15	13.0	29.0	0.8	375	56.25	4.5	9.8
0.22	13.5	34.0	0.8	300	66	5.5	8.4
0.22	15.0	29.	1.0	375	82.5	5.5	7.7
0.33	16.0	34.0	1.0	300	99	7.0	6.6
0.33	17.5	29.0	1.0	375	123.75	7.0	5.9
0.47	18.5	34.0	1.0	300	141	9.0	5.4
0.68	18.0	46.0	1.0	200	136	9.0	5.4
0.68	21.5	34.0	1.0	300	204	10.0	4.3
1	21.5	46.0	1.0	200	200	10.5	4.3
1	26.0	34.0	1.2	300	300	13.0	3.2
1.5	25.5	46.0	1.2	200	300	14.0	3.5
2	29.0	46.0	1.2	200	400	14.0	2.9
2.2	25.0	59.0	1.2	110	242	14.0	4.3
2.2	26.5	55.0	1.2	125	275	14.0	3.8
2.2	30.0	46.0	1.2	200	440	14.0	2.9
2.5	28.5	59.0	1.2	110	275	14.0	4.1
2.5	28.0	55.0	1.2	125	312.5	14.0	3.6
2.5	32.0	46.0	1.2	200	500	14.0	2.7
3	29.0	59.0	1.2	110	330	14.0	3.6
3	30.5	55.0	1.2	125	375	14.0	3.2
3	34.5	46.0	1.2	200	600	14.0	2.4
3.3	30.0	59.0	1.2	110	363	14.0	3.5
3.3	32.0	55.0	1.2	125	412.5	14.0	3.1
4	33.0	59.0	1.2	110	440	14.0	3.1
4	35.0	55.0	1.2	125	500	14.0	2.8
4.7	35.5	59.0	1.2	110	517	14.0	2.8
4.7	37.0	55.0	1.2	125	587.5	14.0	2.5
5	36.5	59.0	1.2	110	550	14.0	2.7
5	38.0	55.0	1.2	125	625	14.0	2.4
5.6	40.5	55.0	1.2	110	748	14.0	2.3
6.8	41.5	59.0	1.2	110	748	14.0	2.3
10.0	41.5	55.0	1.2	45	748	14.0	4.9