

# Metallized Polypropylene Film Capacitor(Lud Terminal) High Frequency/Switching Application

## FPE

订购基本规格

### EXPLANATION OF ARTICLE CODE

F P E -	1 0 6	K	2 R	N	4 2	S	L
①	②	③	④	⑤	⑥	⑦	⑧

#### ① Capacitor Type

TYPE	FPE
CODE	DPE-

#### 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	630V	700V	800V	850V	900V	1000V	1100V	1200V
CODE	2J	2S	2K	2T	2U	3A	3L	3M

#### ⑤ Internal Code

#### ⑥ Case Length Unit: mm

Case Length	32.5	36.5	42.5	57.5	59.5	62.5
CODE	32	36	42	57	59	62

#### ⑦ Terminal Configuration

Lead Pitch	Style S	Style W	Style B	Style F	Style A	Style N	Style P	Style Y
CODE	S	W	B	F	A	N	P	Y

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### EXPLANATION OF ARTICLE CODE

FPE -	106	K	2K	N	42	S	L
①	②	③	④	⑤	⑥	⑦	⑧

#### ⑧ Lead Length

P1	23~28	24~26	29~39	20~25	21~23	33~42	33~45	17.5~28.5
P2	11	11	11	8	8	8	15	6
OUTPUT	M6	M6	M6	M6	M6	M6	M6	M6
CODE	L	A	B	C	D	E	F	G

P1	37~39	36~41	49~58	46~58	53~62
P2	24	24	24	28	28
OUTPUT	M6	M6	M6	M6	M6
CODE	J	H	K	M	N

P1	23~28	24~26	29~39	20~25	21~23	33~42	33~45	17.5~28.5
P2	11	11	11	8	8	8	15	6
OUTPUT	M8	M8	M8	M8	M8	M8	M8	M8
CODE	P	Q	R	S	T	U	V	W

P1	37~39	36~41	49~58
P2	24	24	24
OUTPUT	M8	M8	M8
CODE	X	Y	Z

# Metallized Polypropylene Film Capacitor(Lud Terminal) High Frequency/Switching Application

## FPE

High current switching capacitor consists of wound metallized polypropylene film, plastic casing sealed with epoxy. 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°C - +85°C

Capacitance range: 0.1μF - 60μF

Capacitance Tolerance: ±5%(J), ±10%(K) at 1KHz

Rated Voltage: 250VDC - 850VDC

Dissipation Factor:  
(1 kHz, 25 °C)  
C ≤ 5uF 0.05% max  
5uF < C ≤ 30uF 0.08% max  
C > 30uF 0.1% max

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

Insulation Resistance: >3,000 MΩ.uF/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 Ur and 70 °C

Lead Terminations: Tinned copper leads  
(RoHS compliant)

# Metallized Polypropylene Film Capacitor(Lud Terminal) High Frequency/Switching Application

**FPE**

■ DIMENSIONS / 产品尺寸

SIZE		250 V D C								
R.V. CAP(μF)	W (mm)	H (mm)	T (mm)	Output	ESL nH	dv/dt (v/us)	I peak (A)	Irms @100KHz +70°C (A)	ESR @100KHz mΩ	
4.7	32.0	33.0	18.0	M6	36.0	59	279	22.0	2.6	
6.8	32.0	33.0	18.0	M6	36.0	59	403	26.0	1.9	
10.0	41.5	40.0	20.0	M6	41.0	40	402	27.0	2.6	
15.0	41.5	40.0	20.0	M6	41.0	40	602	32.0	1.8	
20.0	42.5	37.0	28.0	M6	36.0	40	803	39.0	1.4	
25.0	42.0	44.0	24.0	M6	43.0	40	1004	43.0	1.2	
30.0	42.0	45.0	30.0	M6	43.0	40	1205	50.0	1.0	
40.0	57.5	45.0	30.0	M6	45.0	27	1082	46.0	1.5	
50.0	57.5	50.0	35.0	M6	48.0	27	1353	54.0	1.2	
60.0	57.5	50.0	35.0	M6	48.0	27	1624	58.0	1.1	

■ DIMENSIONS / 产品尺寸

SIZE		400 V D C								
R.V. CAP(μF)	W (mm)	H (mm)	T (mm)	Output	ESL nH	dv/dt (v/us)	I peak (A)	Irms @100KHz +70°C (A)	ESR @100KHz mΩ	
3.3	32.0	33.0	18.0	M6	36.0	74	245	21.0	3.0	
4.0	32.0	33.0	18.0	M6	36.0	74	296	23.0	2.5	
4.0	41.5	40.0	20.0	M6	41.0	50	201	19.0	4.9	
5.0	32.0	33.0	18.0	M6	36.0	74	370	25.0	2.0	
5.0	41.5	40.0	20.0	M6	41.0	50	251	22.0	4.0	
6.8	41.5	40.0	20.0	M6	41.0	50	341	25.0	3.0	
10.0	41.5	40.0	20.0	M6	41.0	50	502	30.0	2.1	
12.5	42.5	37.0	28.0	M6	36.0	50	627	35.0	1.7	
15.0	42.5	37.0	28.0	M6	36.0	50	753	38.0	1.5	
20.0	42.0	45.0	30.0	M6	43.0	50	1004	46.0	1.2	
25.0	42.0	45.0	30.0	M6	45.0	34	846	41.0	1.8	
30.0	42.0	45.0	30.0	M6	45.0	34	1015	45.0	1.6	
35.0	57.5	50.0	50.0	M6	48.0	34	1184	52.0	1.4	
40.0	57.5	50.0	50.0	M6	48.0	34	1353	54.0	1.2	

■ DIMENSIONS / 产品尺寸

SIZE		600 V D C								
R.V. CAP(μF)	W (mm)	H (mm)	T (mm)	Output	ESL nH	dv/dt (v/us)	I peak (A)	Irms @100KHz +70°C (A)	ESR @100KHz mΩ	
2.5	32.0	33.0	18.0	M6	36.0	104	259	21.0	2.9	
2.5	41.5	40.0	20.0	M6	41.0	70	176	18.0	5.7	
3.0	41.5	40.0	20.0	M6	41.0	70	211	20.0	4.8	
4.0	41.5	40.0	20.0	M6	41.0	70	281	23.0	3.6	
5.0	41.5	40.0	20.0	M6	41.0	70	351	25.0	2.9	
6.8	42.5	37.0	28.0	M6	41.0	70	478	31.0	2.2	
8.0	42.0	44.0	24.0	M6	43.0	70	562	34.0	1.9	
10.0	42.0	45.0	30.0	M6	43.0	70	703	40.0	1.6	
12.5	57.5	45.0	30.0	M6	45.0	47	592	35.0	2.5	
15.0	57.5	45.0	30.0	M6	45.0	47	710	38.0	2.1	
20.0	57.5	50.0	35.0	M6	48.0	47	947	47.0	1.7	

# Metallized Polypropylene Film Capacitor(Lud Terminal) High Frequency/Switching Application

FPE

## ■ DIMENSIONS / 产品尺寸

SIZE R.V. CAP(μF)	700 V D C								
	W (mm)	H (mm)	T (mm)	Output	ESL nH	dv/dt (v/us)	I peak (A)	I rms @100KHz +70°C (A)	ESR @100KHz mΩ
1.5	32.0	33.0	18.0	M6	36.0	119	178	18.0	4.2
1.5	41.5	40.0	20.0	M6	41.0	80	120	15.0	8.2
2.0	32.0	33.0	18.0	M6	36.0	119	237	20.0	3.2
2.0	41.5	40.0	20.0	M6	41.0	80	161	17.0	6.2
2.2	41.5	40.0	20.0	M6	41.0	80	177	18.0	5.7
3.0	41.5	40.0	20.0	M6	41.0	80	241	21.0	4.2
4.0	41.5	40.0	20.0	M6	41.0	80	321	24.0	3.2
5.0	42.0	37.0	28.0	M6	36.0	80	402	29.0	2.6
8.0	57.5	45.0	30.0	M6	43.0	80	642	38.0	1.7
10.0	57.5	45.0	30.0	M6	45.0	54	541	34.0	2.7
15.0	57.5	50.0	35.0	M6	48.0	54	812	44.0	1.9

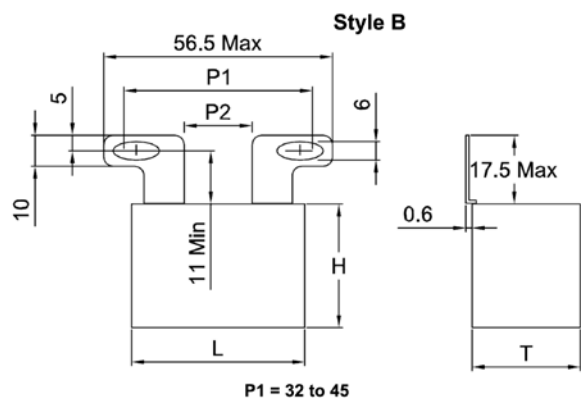
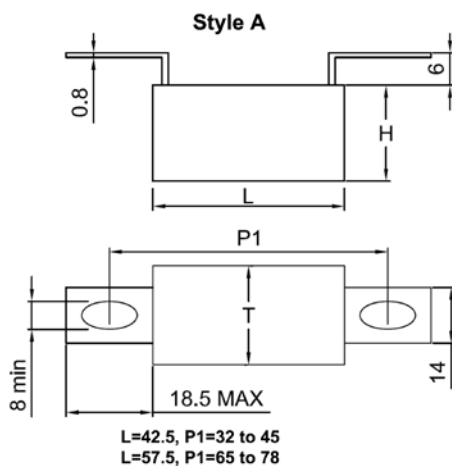
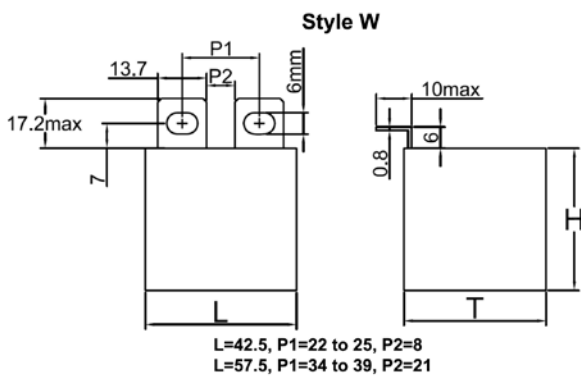
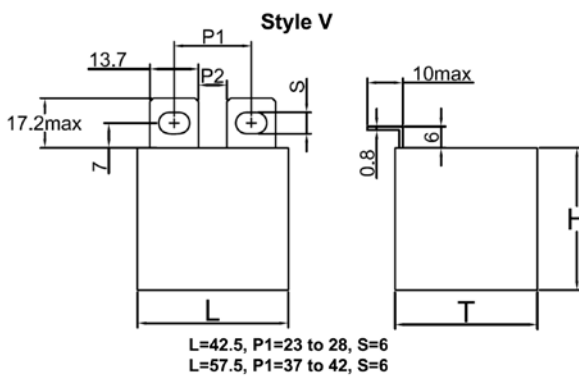
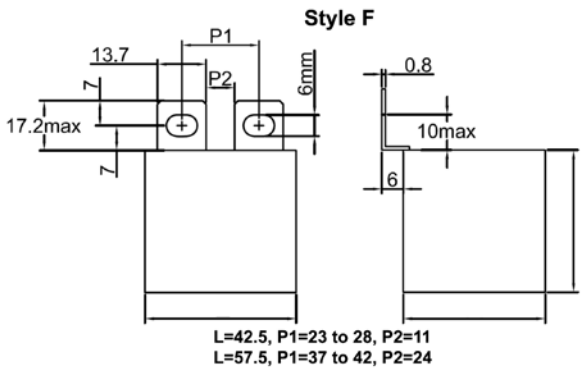
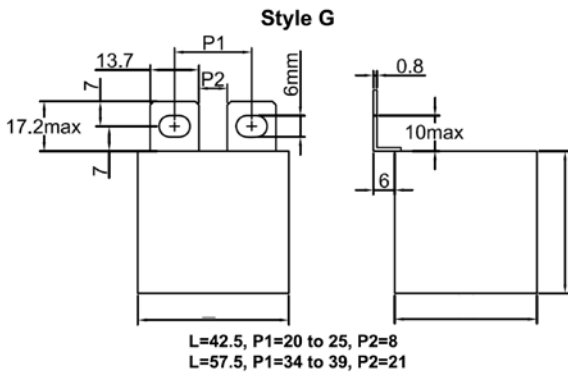
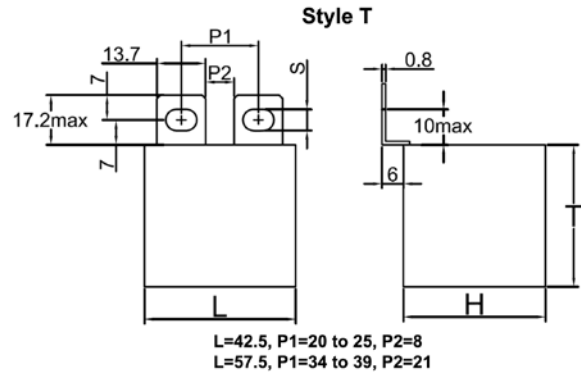
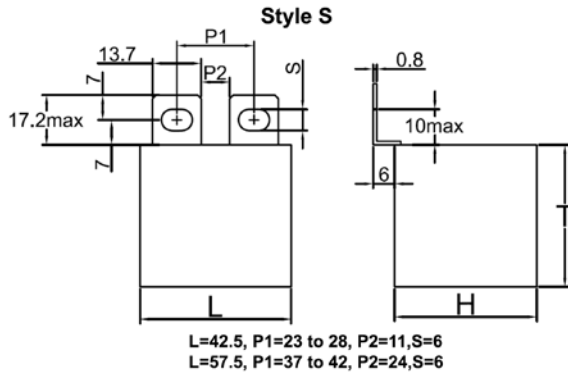
## ■ DIMENSIONS / 产品尺寸

SIZE R.V. CAP(μF)	850 V D C								
	W (mm)	H (mm)	T (mm)	Output	ESL nH	dv/dt (v/us)	I peak (A)	I rms @100KHz +70°C (A)	ESR @100KHz mΩ
1.0	32.0	33.0	18.0	M6	36.0	148	148	16.0	5.1
1.0	41.5	40.0	20.0	M6	41.0	100	100	14.0	9.9
1.5	41.5	40.0	20.0	M6	41.0	100	151	17.0	6.7
2.0	41.5	40.0	20.0	M6	41.0	100	201	19.0	5.1
3.0	41.5	40.0	20.0	M6	41.0	100	301	23.0	3.4
4.0	42.0	44.0	24.0	M6	43.0	100	402	29.0	2.6
5.0	42.0	45.0	30.0	M6	43.0	100	502	34.0	2.2
8.0	57.5	50.0	35.0	M6	48.0	68	541	37.0	2.8
10.0	57.5	50.0	35.0	M6	48.0	68	677	40.0	2.3

# Metallized Polypropylene Film Capacitor(Lug Terminal) High Frequency/Switching Application

## FPE

### Terminal Style:



Unit = Milimeter (mm)