

Polypropylene Film Capacitor Epoxy Coated

PFFN Series

MERITEK

FEATURES

- Operating temperature: -40°C ~ +105°C
- Non-inductive Wound Construction
- Excellent Frequency and Temperature Characteristics
- Low Loss Even at High Frequency
- Reference Standard: IEC 60384-13
- Flame Retardant Epoxy Resin Coating UL94V-0



PART NUMBERING SYSTEM

PFFN 102 J 2A 65
(1) (2) (3) (4) (5)



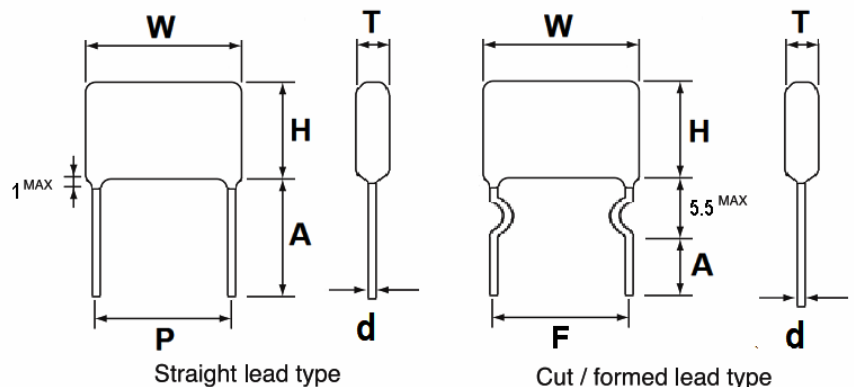
No	item	Code	Description	
(1)	Meritek Series	PFFN	Polypropylene Film/Foil Capacitor; Epoxy Coated Type	
(2)	Capacitance	102	102: 0.0010μF	First two digit: Significant, Third: Multiplier
(3)	Tolerance	J	J: ±5%	K: ±10%
(4)	Rated Voltage	2A	2A: 100VDC	DC Voltage Code
(5)	Internal Code	65	65: 6.5mm Pitch	Internal Control or Project Reference

ELECTRICAL CHARACTERISTICS

Item	Description	
Capacitance Range	0.001~0.1 μF	
Capacitance Tolerance	±5%(J), ±10%(K)	
Rated Voltage	100(2A), 250(2E), 400(2G), 630(2J) VDC	
Climatic Category	40/105/21	
Operating Temperature Range	-40°C~+105°C Derating ratio of rated voltage to +85 ~ +105°C: 1.25% per °C for rated voltage	
Dissipation Factor (tan δ)	≤ 0.1% at +25°C / 1KHz	
Insulation Resistance- Between Terminals, U _R >100V	C ≤ 0.1μF	≥ 50,000MΩ
	C > 0.1μF	≥ 5,000s (20°C, 100V, 1min)
Withstand Voltage- Between Terminals	2 x Rated Voltage for 5 sec.	

DIMENSION

P (mm)	d (mm)
6.5	0.6
7.5	0.6
8.5	0.6
10.0	0.6
11.0	0.6
12.5	0.6
13.0	0.6
14.0	0.6
19.0	0.8



Note:

1. WxHxT (mm) See the table below
2. Standard lead length A: 15mm min.
3. Contact Meritek for other available options for lead forming (F)

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DIMENSION

100VDC							250VDC						
Cap(μF)	%	W	H	T	P	d	Cap(μF)	%	W	H	T	P	d
0.0010	J,K	9.0	8.5	4.5	6.5	0.6	0.0010	J,K	12.0	9.5	5.5	8.5	0.6
0.0015	J,K	9.0	9.5	5.5	6.5	0.6	0.0015	J,K	12.0	10.0	6.5	8.5	0.6
0.0018	J,K	9.0	9.5	5.5	6.5	0.6	0.0018	J,K	12.0	10.5	6.5	8.5	0.6
0.0022	J,K	9.0	9.5	5.5	6.5	0.6	0.0022	J,K	12.0	9.5	5.5	8.5	0.6
0.0027	J,K	9.0	9.0	5.0	6.5	0.6	0.0027	J,K	12.0	10.0	6.0	8.5	0.6
0.0033	J,K	9.0	9.0	5.5	6.5	0.6	0.0033	J,K	12.0	10.0	6.0	8.5	0.6
0.0039	J,K	9.0	9.5	5.5	6.5	0.6	0.0039	J,K	12.0	10.5	6.5	8.5	0.6
0.0047	J,K	9.0	9.0	5.0	6.5	0.6	0.0047	J,K	12.0	10.0	6.0	8.5	0.6
0.0056	J,K	9.0	9.5	5.5	6.5	0.6	0.0056	J,K	12.0	10.5	6.5	8.5	0.6
0.0068	J,K	9.0	10.0	6.0	6.5	0.6	0.0068	J,K	12.0	10.5	7.0	8.5	0.6
0.0075	J,K	10.0	9.5	6.0	7.5	0.6	0.0075	J,K	13.5	10.5	6.5	10.0	0.6
0.0082	J,K	10.0	10.0	6.0	7.5	0.6	0.0082	J,K	13.5	10.5	6.5	10.0	0.6
0.0091	J,K	10.0	10.0	6.0	7.5	0.6	0.0091	J,K	13.5	10.5	6.5	10.0	0.6
0.0100	J,K	10.0	10.5	6.5	7.5	0.6	0.0100	J,K	13.5	11.0	7.0	10.0	0.6
0.0120	J,K	10.0	11.0	7.0	7.5	0.6	0.0120	J,K	18.0	11.0	6.0	14.0	0.6
0.0150	J,K	12.0	10.5	6.5	8.5	0.6	0.0150	J,K	18.0	11.5	6.0	14.0	0.6
0.0180	J,K	12.0	10.5	7.0	8.5	0.6	0.0180	J,K	18.0	11.5	6.5	14.0	0.6
0.0220	J,K	12.0	11.0	7.5	8.5	0.6	0.0220	J,K	18.0	12.0	7.0	14.0	0.6
0.0270	J,K	12.0	12.0	8.0	8.5	0.6	0.0270	J,K	18.0	13.5	7.0	14.0	0.6
0.0330	J,K	13.5	11.5	7.0	10.0	0.6	0.0330	J,K	18.0	14.0	7.5	14.0	0.6
0.0390	J,K	13.5	12.0	7.5	10.0	0.6	0.0390	J,K	18.0	14.5	8.0	14.0	0.6
0.0470	J,K	13.5	12.5	8.0	10.0	0.6	0.0470	J,K	18.0	15.5	8.5	14.0	0.6
0.0560	J,K	13.5	13.0	8.5	10.0	0.6	0.0560	J,K	22.5	16.0	8.0	19.0	0.8
0.0680	J,K	17.0	13.0	7.5	13.0	0.6	0.0680	J,K	22.5	16.5	8.5	19.0	0.8
0.0820	J,K	17.0	13.5	8.0	13.0	0.6	0.0820	J,K	22.5	17.0	9.5	19.0	0.8
0.1000	J,K	17.0	14.0	8.5	13.0	0.6	0.1000	J,K	22.5	18.0	10.0	19.0	0.8

Unit: mm

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Epoxy Coated**

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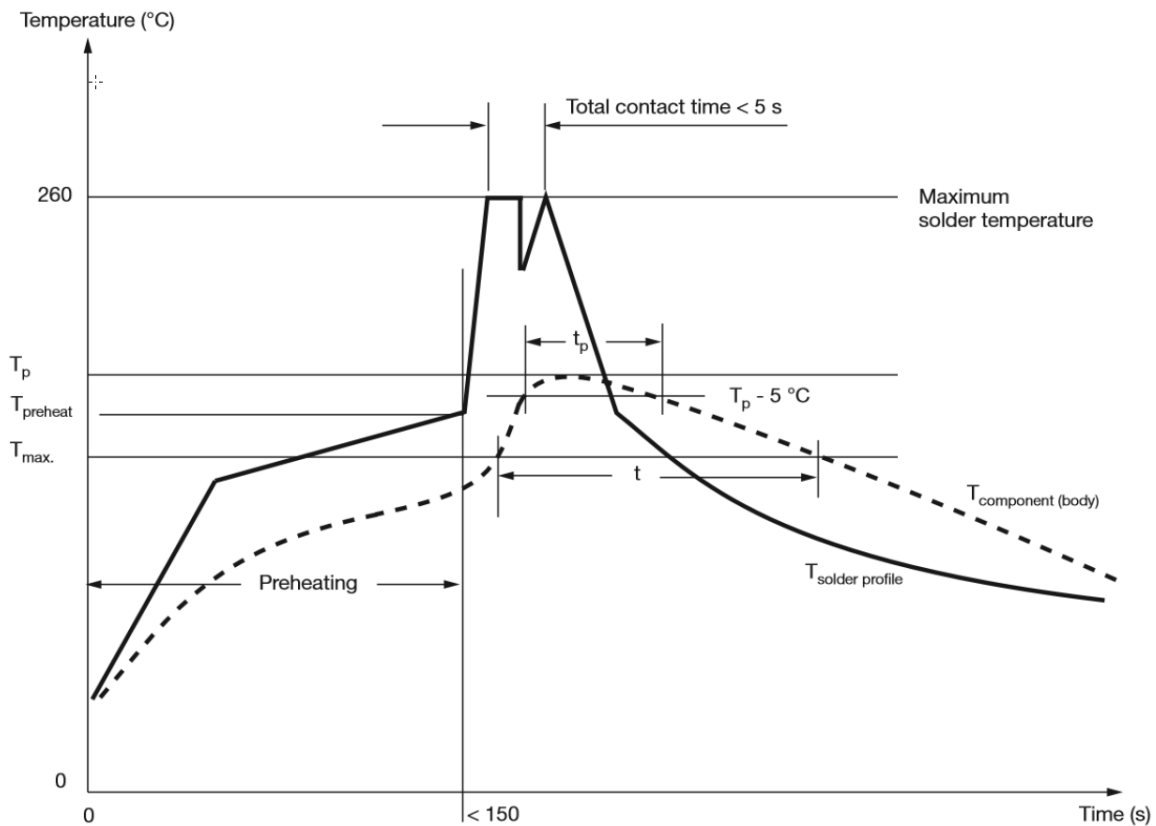
MERITEK

DIMENSION

400VDC							630VDC						
Cap(μF)	%	W	H	T	P	d	Cap(μF)	%	W	H	T	P	d
0.0010	J,K	13.5	10.0	6.0	10.0	0.6	0.0010	J,K	15.0	10.0	6.0	11.0	0.6
0.0012	J,K	13.5	10.5	6.5	10.0	0.6	0.0012	J,K	15.0	10.5	6.5	11.0	0.6
0.0015	J,K	13.5	10.5	6.5	10.0	0.6	0.0015	J,K	15.0	10.5	6.5	11.0	0.6
0.0016	J,K	13.5	10.0	6.0	10.0	0.6	0.0016	J,K	15.0	10.5	6.0	11.0	0.6
0.0018	J,K	13.5	10.5	6.5	10.0	0.6	0.0018	J,K	15.0	11.0	6.0	11.0	0.6
0.0020	J,K	13.5	9.0	5.5	10.0	0.6	0.0020	J,K	15.0	11.0	6.5	11.0	0.6
0.0022	J,K	13.5	9.5	5.5	10.0	0.6	0.0022	J,K	15.0	11.0	6.5	11.0	0.6
0.0024	J,K	13.5	9.5	5.5	10.0	0.6	0.0024	J,K	15.0	11.5	6.5	11.0	0.6
0.0027	J,K	13.5	9.5	5.5	10.0	0.6	0.0027	J,K	15.0	11.5	7.0	11.0	0.6
0.0030	J,K	13.5	9.5	6.0	10.0	0.6	0.0030	J,K	15.0	11.5	7.0	11.0	0.6
0.0033	J,K	13.5	9.5	6.0	10.0	0.6	0.0033	J,K	15.0	12.0	7.0	11.0	0.6
0.0036	J,K	15.0	11.0	5.5	11.0	0.6	0.0036	J,K	15.0	12.0	7.5	11.0	0.6
0.0039	J,K	15.0	11.0	6.0	11.0	0.6	0.0039	J,K	15.0	12.5	7.5	11.0	0.6
0.0043	J,K	15.0	11.0	6.0	11.0	0.6	0.0043	J,K	15.0	12.5	8.0	11.0	0.6
0.0047	J,K	15.0	11.5	6.0	11.0	0.6	0.0047	J,K	15.0	13.0	8.0	11.0	0.6
0.0051	J,K	15.0	11.5	6.5	11.0	0.6	0.0051	J,K	18.0	11.5	6.5	14.0	0.6
0.0056	J,K	15.0	11.5	6.5	11.0	0.6	0.0056	J,K	18.0	12.0	6.5	14.0	0.6
0.0062	J,K	15.0	12.0	6.5	11.0	0.6	0.0062	J,K	18.0	12.0	7.0	14.0	0.6
0.0068	J,K	15.0	12.0	7.0	11.0	0.6	0.0068	J,K	18.0	12.5	7.0	14.0	0.6
0.0075	J,K	15.0	12.0	7.0	11.0	0.6	0.0075	J,K	18.0	12.5	7.5	14.0	0.6
0.0082	J,K	15.0	12.5	7.0	11.0	0.6	0.0082	J,K	18.0	13.0	7.5	14.0	0.6
0.0091	J,K	15.0	12.5	7.5	11.0	0.6	0.0091	J,K	18.0	14.0	7.5	14.0	0.6
0.0100	J,K	15.0	13.0	8.0	11.0	0.6	0.0100	J,K	18.0	14.5	7.5	14.0	0.6

Unit: mm

RECOMMENDED SOLDERING PROFILE- Wave Soldering



The PSL (Process Sensitivity Level) is classified according JEDEC standard J-STD-075 “Classification of Non-IC Electronic Components for Assembly Processes” and summarized in following tables per product family and pitch size of the component:

Series	Pitch Size							
	6.5mm	7.5mm	8.5mm	10mm	11mm	12.5/13mm	14/15mm	19mm
PFFN	(3)(5)	(3)(5)	(3)(5)	(2)(5)	(2)(5)	(2)(5)	(1)(6)	(1)(6)

Notes

- (1) No risk
- (2) Risk for parameter change if PSL is not strictly followed
- (3) Risk for product damage if PSL is not strictly followed
- (4) Temperature is measured at the body top and must be kept as follows:
 - a. During preheating: $T_{max} \leq 100\text{ }^{\circ}\text{C}$
 - b. During soldering: $T_p \leq 110\text{ }^{\circ}\text{C}$, $t_p \leq 20\text{ s}$, $t \leq 30\text{ s}$
- (5) Temperature is measured at the body top and must be kept as follows:
 - c. During preheating: $T_{max} \leq 100\text{ }^{\circ}\text{C}$
 - d. During soldering: $T_p \leq 120\text{ }^{\circ}\text{C}$, $t_p \leq 20\text{ s}$, $t \leq 30\text{ s}$
- (6) The component has a preheat limitation of $150\text{ }^{\circ}\text{C}$

*Specifications subject to change without notice.