

# Metallized Polypropylene Film/Foil Capacitor Epoxy Coated

PFFV Series

**MERITEK**

## FEATURES

- Operating temperature: -40°C ~ +105°C
- Wound Construction
- Low Loss and Small Inherent Temperature Rise
- Negative temperature Coefficient of Capacitance
- Reference Standard: IEC 60384-16
- Flame Retardant Epoxy Resin Coating UL94V-0



## PART NUMBERING SYSTEM

PFFV   102   J   2K   15  
(1)   (2)   (3)   (4)   (5)



No	item	Code	Description	
(1)	Meritek Series	PFFV	Metallized Polypropylene Film/Foil Capacitor; High Voltage Epoxy Coated Type	
(2)	Capacitance	102	102: 0.0010μF	First two digit: Significant, Third: Multiplier
(3)	Tolerance	J	J: ±5%	K: ±10%; M: ±20%
(4)	Rated Voltage	2K	2K: 800VDC	DC Voltage Code
(5)	Internal Code	15	15: 15mm Pitch	Internal Control or Project Reference

## ELECTRICAL CHARACTERISTICS

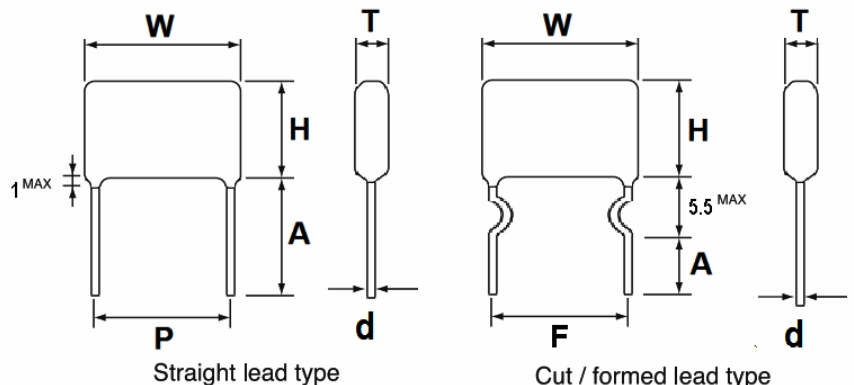
Item	Description	
Capacitance Range	0.001 ~ 0.036 μF	
Capacitance Tolerance	±5%(J), ±10%(K), ±20%(M)	
Rated Voltage	800(2K), 1000(3A), 1250(3B), 1600(3C), 2000(3D) VDC	
Climatic Category	40/105/21	
Operating Temperature Range	-40°C~+105°C Derating ratio of rated voltage to +85 ~ +105°C: 1.25% per °C for rated voltage	
Dissipation Factor (tan δ)	≤ 0.1% at +20°C / 1KHz	
Insulation Resistance- Between Terminals	C ≤ 0.33μF	≥ 15,000MΩ
	C > 0.33μF	≥ 5,000s
Withstand Voltage- Between Terminals	1.5 x Rated Voltage for 60 sec.	

## DIMENSION

P (mm)	d (mm)
15.0	0.8
20.0	0.8
22.5	0.8
25.0	0.8
27.5	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

800VDC (400VAC)							1000/1250VDC (450VAC)						
Cap( $\mu$ F)	%	W	H	T	P	d	Cap( $\mu$ F)	%	W	H	T	P	d
0.0010	J,K,M	18.5	12.0	7.0	15.0	0.8	0.0010	J,K,M	18.5	12.0	7.0	15.0	0.8
0.0015	J,K,M	18.5	13.0	7.5	15.0	0.8	0.0015	J,K,M	18.5	13.0	7.5	15.0	0.8
0.0018	J,K,M	18.5	13.5	8.0	15.0	0.8	0.0018	J,K,M	18.5	13.5	8.0	15.0	0.8
0.0022	J,K,M	18.5	14.0	9.0	15.0	0.8	0.0022	J,K,M	18.5	14.0	9.0	15.0	0.8
0.0027	J,K,M	18.5	14.5	9.5	15.0	0.8	0.0027	J,K,M	18.5	14.5	9.5	15.0	0.8
0.0033	J,K,M	18.5	15.5	10.0	15.0	0.8	0.0033	J,K,M	18.5	15.5	10.0	15.0	0.8
0.0039	J,K,M	18.5	13.5	8.5	15.0	0.8	0.0036	J,K,M	18.5	13.0	8.0	15.0	0.8
0.0043	J,K,M	18.5	14.0	8.5	15.0	0.8	0.0039	J,K,M	18.5	13.5	8.5	15.0	0.8
0.0047	J,K,M	18.5	14.0	9.0	15.0	0.8	0.0043	J,K,M	18.5	14.0	8.5	15.0	0.8
0.0053	J,K,M	18.5	14.5	9.5	15.0	0.8	0.0047	J,K,M	18.5	14.0	9.0	15.0	0.8
0.0056	J,K,M	18.5	14.5	9.5	15.0	0.8	0.0049	J,K,M	18.5	14.0	9.0	15.0	0.8
0.0068	J,K,M	18.5	15.5	10.5	15.0	0.8	0.0053	J,K,M	18.5	14.5	9.5	15.0	0.8
0.0072	J,K,M	18.5	15.5	10.5	15.0	0.8	0.0056	J,K,M	18.5	14.5	9.5	15.0	0.8
0.0075	J,K,M	18.5	16.0	10.5	15.0	0.8	0.0062	J,K,M	23.0	14.5	7.5	20.0	0.8
0.0082	J,K,M	18.5	16.5	11.0	15.0	0.8	0.0065	J,K,M	23.0	14.5	8.0	20.0	0.8
0.0084	J,K,M	18.5	16.5	11.0	15.0	0.8	0.0068	J,K,M	23.0	14.5	8.0	20.0	0.8
0.0091	J,K,M	18.5	17.0	11.5	15.0	0.8	0.0072	J,K,M	23.0	15.0	8.0	20.0	0.8
0.0100	J,K,M	18.5	17.5	12.0	15.0	0.8	0.0075	J,K,M	23.0	15.0	8.0	20.0	0.8
0.0150	J,K,M	18.5	14.0	8.5	15.0	0.8	0.0078	J,K,M	23.0	15.0	8.5	20.0	0.8
0.0180	J,K,M	18.5	14.5	9.5	15.0	0.8	0.0082	J,K,M	23.0	15.5	8.5	20.0	0.8
0.0220	J,K,M	18.5	15.5	10.0	15.0	0.8	0.0084	J,K,M	23.0	15.5	8.5	20.0	0.8
0.0240	J,K,M	18.5	15.5	10.5	15.0	0.8	0.0100	J,K,M	23.0	16.0	9.0	20.0	0.8
0.0270	J,K,M	18.5	16.0	11.0	15.0	0.8	0.0120	J,K,M	23.0	16.5	10.0	20.0	0.8
0.0330	J,K,M	23.0	16.0	9.5	20.0	0.8	0.0150	J,K,M	29.0	15.5	9.0	25.0	0.8
0.0360	J,K,M	23.0	16.5	9.5	20.0	0.8	0.0180	J,K,M	29.0	16.5	9.5	25.0	0.8
0.0390	J,K,M	23.0	16.5	10.0	20.0	0.8	0.0220	J,K,M	29.0	18.5	10.0	25.0	0.8
0.0470	J,K,M	23.0	17.5	11.0	20.0	0.8	0.0240	J,K,M	29.0	18.5	10.5	25.0	0.8
0.0560	J,K,M	23.0	18.5	11.5	20.0	0.8	0.0270	J,K,M	29.0	19.0	11.0	25.0	0.8
0.0680	J,K,M	26.0	19.0	11.0	22.5	0.8	0.0330	J,K,M	29.0	20.5	12.0	25.0	0.8
0.1000	J,K,M	26.0	21.5	13.0	22.5	0.8	0.0360	J,K,M	29.0	20.5	12.5	25.0	0.8

Unit: mm

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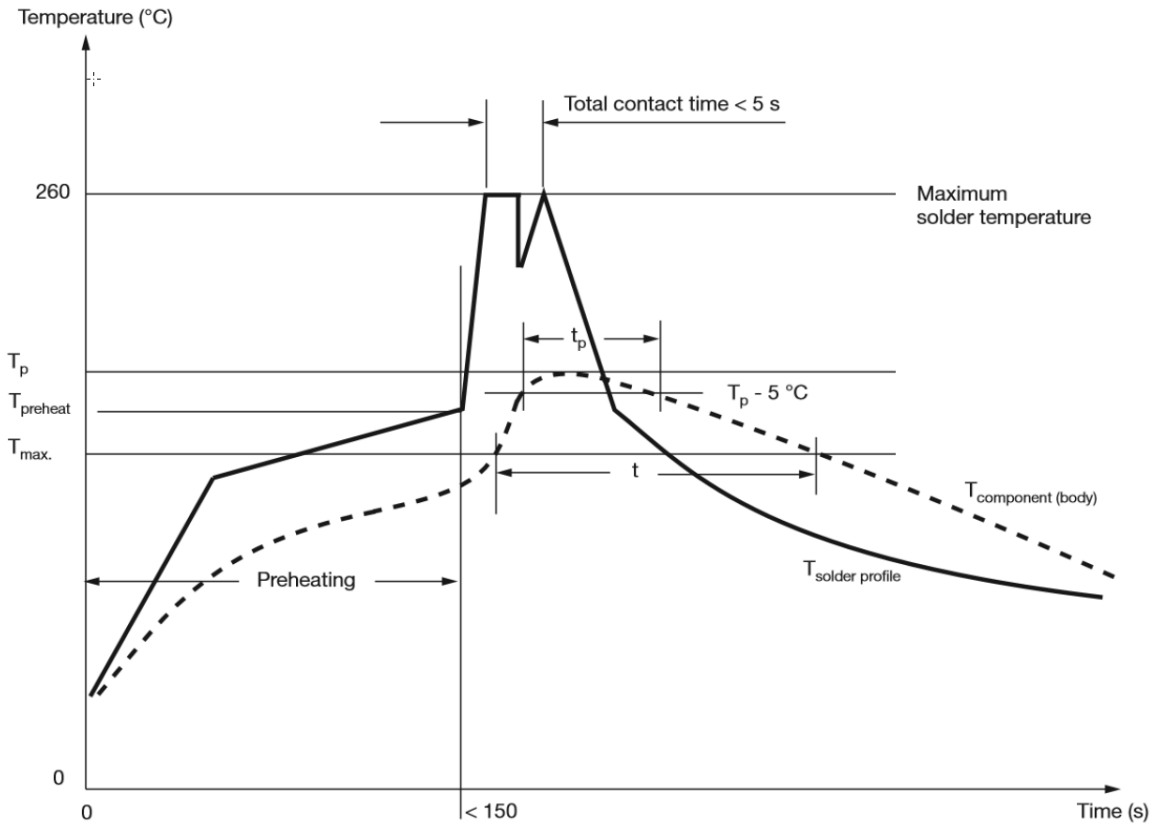
**MERITEK**

## DIMENSION

1600VDC (500VAC)							2000VDC (500VAC)						
Cap(μF)	%	W	H	T	P	d	Cap(μF)	%	W	H	T	P	d
0.0010	J,K,M	18.5	12.0	7.0	15.0	0.8	0.0010	J,K,M	18.5	12.0	7.0	15.0	0.8
0.0012	J,K,M	18.5	12.5	7.0	15.0	0.8	0.0012	J,K,M	18.5	12.5	7.0	15.0	0.8
0.0015	J,K,M	18.5	13.0	7.5	15.0	0.8	0.0015	J,K,M	18.5	13.0	7.5	15.0	0.8
0.0016	J,K,M	18.5	13.0	8.0	15.0	0.8	0.0016	J,K,M	18.5	13.0	8.0	15.0	0.8
0.0018	J,K,M	18.5	13.5	8.0	15.0	0.8	0.0018	J,K,M	18.5	13.5	8.0	15.0	0.8
0.0020	J,K,M	18.5	13.5	8.5	15.0	0.8	0.0020	J,K,M	18.5	13.5	8.5	15.0	0.8
0.0022	J,K,M	18.5	14.0	9.0	15.0	0.8	0.0022	J,K,M	18.5	14.0	9.0	15.0	0.8
0.0024	J,K,M	18.5	14.5	9.0	15.0	0.8	0.0024	J,K,M	18.5	14.5	9.0	15.0	0.8
0.0027	J,K,M	18.5	14.5	9.5	15.0	0.8	0.0027	J,K,M	18.5	14.5	9.5	15.0	0.8
0.0030	J,K,M	18.5	15.0	10.0	15.0	0.8	0.0030	J,K,M	18.5	15.0	10.0	15.0	0.8
0.0033	J,K,M	18.5	15.5	10.0	15.0	0.8	0.0033	J,K,M	18.5	15.5	10.0	15.0	0.8
0.0036	J,K,M	23.0	14.5	9.0	20.0	0.8	0.0036	J,K,M	23.0	14.5	9.0	20.0	0.8
0.0039	J,K,M	23.0	15.5	9.0	20.0	0.8	0.0039	J,K,M	23.0	15.5	9.0	20.0	0.8
0.0043	J,K,M	23.0	16.0	9.0	20.0	0.8	0.0043	J,K,M	23.0	16.0	9.0	20.0	0.8
0.0047	J,K,M	23.0	16.0	9.5	20.0	0.8	0.0047	J,K,M	23.0	16.0	9.5	20.0	0.8
0.0049	J,K,M	23.0	16.5	9.5	20.0	0.8	0.0049	J,K,M	23.0	16.5	9.5	20.0	0.8
0.0051	J,K,M	23.0	16.5	10.0	20.0	0.8	0.0051	J,K,M	23.0	16.5	10.0	20.0	0.8
0.0053	J,K,M	23.0	16.5	10.0	20.0	0.8	0.0053	J,K,M	23.0	16.5	10.0	20.0	0.8
0.0056	J,K,M	23.0	17.0	10.0	20.0	0.8	0.0056	J,K,M	23.0	17.0	10.0	20.0	0.8
0.0060	J,K,M	23.0	15.5	8.5	20.0	0.8	0.0060	J,K,M	23.0	15.5	8.5	20.0	0.8
0.0062	J,K,M	23.0	15.5	9.0	20.0	0.8	0.0062	J,K,M	23.0	15.5	9.0	20.0	0.8
0.0065	J,K,M	23.0	15.5	9.0	20.0	0.8	0.0065	J,K,M	23.0	15.5	9.0	20.0	0.8
0.0068	J,K,M	23.0	16.0	9.0	20.0	0.8	0.0068	J,K,M	23.0	16.0	9.0	20.0	0.8
0.0072	J,K,M	23.0	16.0	9.5	20.0	0.8	0.0072	J,K,M	23.0	16.0	9.5	20.0	0.8
0.0075	J,K,M	23.0	16.5	9.5	20.0	0.8	0.0075	J,K,M	23.0	16.5	9.5	20.0	0.8
0.0078	J,K,M	23.0	16.5	9.5	20.0	0.8	0.0078	J,K,M	23.0	16.5	9.5	20.0	0.8
0.0082	J,K,M	23.0	16.5	10.0	20.0	0.8	0.0082	J,K,M	23.0	16.5	10.0	20.0	0.8
0.0084	J,K,M	23.0	16.5	10.0	20.0	0.8	0.0084	J,K,M	23.0	16.5	10.0	20.0	0.8
0.0091	J,K,M	23.0	17.0	10.5	20.0	0.8	0.0091	J,K,M	23.0	17.0	10.5	20.0	0.8
0.0100	J,K,M	29.0	15.5	8.5	25.0	0.8	0.0100	J,K,M	29.0	15.5	8.5	25.0	0.8
0.0120	J,K,M	29.0	16.0	9.5	25.0	0.8	0.0120	J,K,M	29.0	16.0	9.5	25.0	0.8
0.0150	J,K,M	29.0	18.0	9.5	25.0	0.8	0.0150	J,K,M	29.0	18.0	9.5	25.0	0.8
0.0180	J,K,M	29.0	19.0	10.5	25.0	0.8	0.0180	J,K,M	29.0	19.0	10.5	25.0	0.8
0.0220	J,K,M	29.0	20.0	11.5	25.0	0.8	0.0220	J,K,M	29.0	20.0	11.5	25.0	0.8
0.0240	J,K,M	29.0	20.5	12.0	25.0	0.8	0.0240	J,K,M	29.0	20.5	12.0	25.0	0.8
0.0270	J,K,M	31.0	20.5	12.0	27.5	0.8	0.0270	J,K,M	31.0	20.5	12.0	27.5	0.8
0.0330	J,K,M	31.0	21.5	13.0	27.5	0.8	0.0330	J,K,M	31.0	21.5	13.0	27.5	0.8
0.0360	J,K,M	31.0	22.0	13.5	27.5	0.8	0.0360	J,K,M	31.0	22.0	13.5	27.5	0.8

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							
	5mm	7.5mm	10mm	15mm	20/22.5mm	25mm	27.5mm	31.5mm
PFFV	--	--	--	(1)(6)	(1)(6)	(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.