MPP/CBB21 Metallized Polypropylene Film Capacitors (Dipped-Type) Data Sheet

Feature

■Wide capacitance range from 0.01uF to 3.3uF.

■Operating Temperature: -40℃～105℃.

■Storage Temperature: 15℃~35℃.

■Low loss(DF) and small inherent temperature rise.

■Metallized polypropylene film, non-inductive construction.

■Suitable for high pulse and high current loading circuit, high frequency 100KHz.

■Capacitance change little, negative temperature coefficient of capacitance.

■Epoxy resin sealing.

Applications

■Widely used in high frequency, DC, AC and pulse circuit.

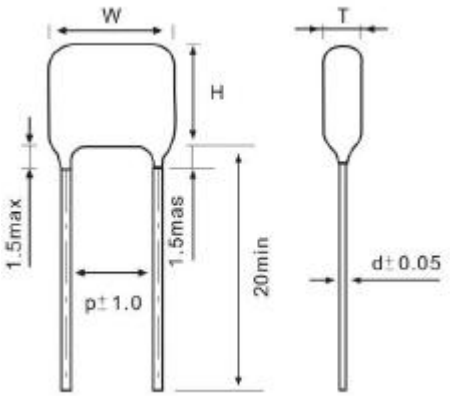
■Widely used in high current pulse.

Part numbering on request.

Specifications

Climatic Category	40/100/21
Rated Voltage	100VDC、250VDC、 400VDC、630VDC、
Dissipation Factor (tanδ)	≤0.1%(1KHz、1.0Vrms、20℃)
Withstand Voltage	$1.6U_R$ (5s)
Insulation Resistance (I.R.)	C≤0.33uF,IR≥50000MΩ C＞0.33uF,IR≥15000S (AT 100VDC、60SEC、20℃)

Dimensions (mm)

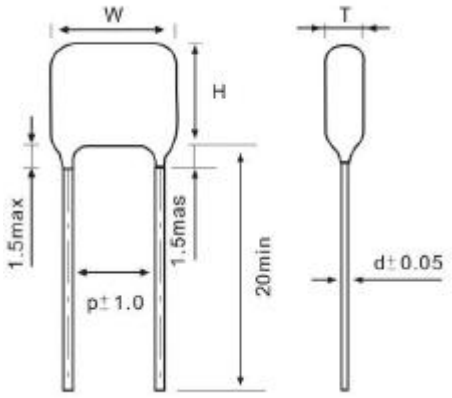
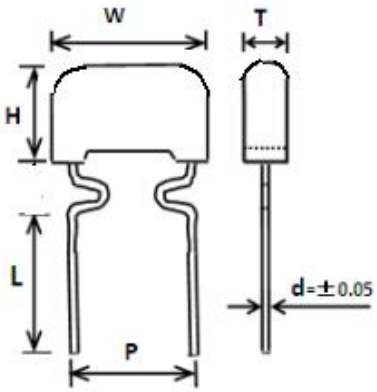


Capacitance (uF)	Rated Voltage	Size (mm)				
		W Max	H Max	T Max	P±1.0	d±0.05
0.01	100VDC	10.0	9.0	5.0	7.5	0.6
	250VDC	10.0	9.0	5.0	7.5	0.6
	400VDC	13.0	9.0	5.5	10.0	0.6
	630VDC	13.0	9.0	5.5	10.0	0.6
0.015	100VDC	10.0	9.0	5.5	7.5	0.6
	250VDC	10.0	9.0	5.5	7.5	0.6
	400VDC	13.0	9.0	5.5	10.0	0.6
	630VDC	13.0	11.0	6.0	10.0	0.6
0.018	100VDC	10.0	9.5	5.5	7.5	0.6
	250VDC	10.0	9.5	5.5	7.5	0.6
	400VDC	13.0	9.0	5.5	10.0	0.6
	630VDC	13.0	9.0	5.5	10.0	0.6
0.022	100VDC	10.0	8.5	5.5	7.5	0.6
	250VDC	10.0	8.5	5.5	7.5	0.6
	400VDC	13.0	9.0	5.5	10.0	0.6
	630VDC	13.0	9.0	5.5	10.0	0.6
0.027	100VDC	10.0	9.5	5.5	7.5	0.6
	250VDC	10.0	9.5	5.5	7.5	0.6
	400VDC	13.0	9.0	5.5	10.0	0.6
	630VDC	13.0	9.0	5.5	10.0	0.6
0.033	100VDC	10.0	9.5	6.0	7.5	0.6
	250VDC	10.0	9.5	6.0	7.5	0.6
	400VDC	13.0	10.0	6.0	10.0	0.6
	630VDC	13.0	10.0	6.0	10.0	0.6

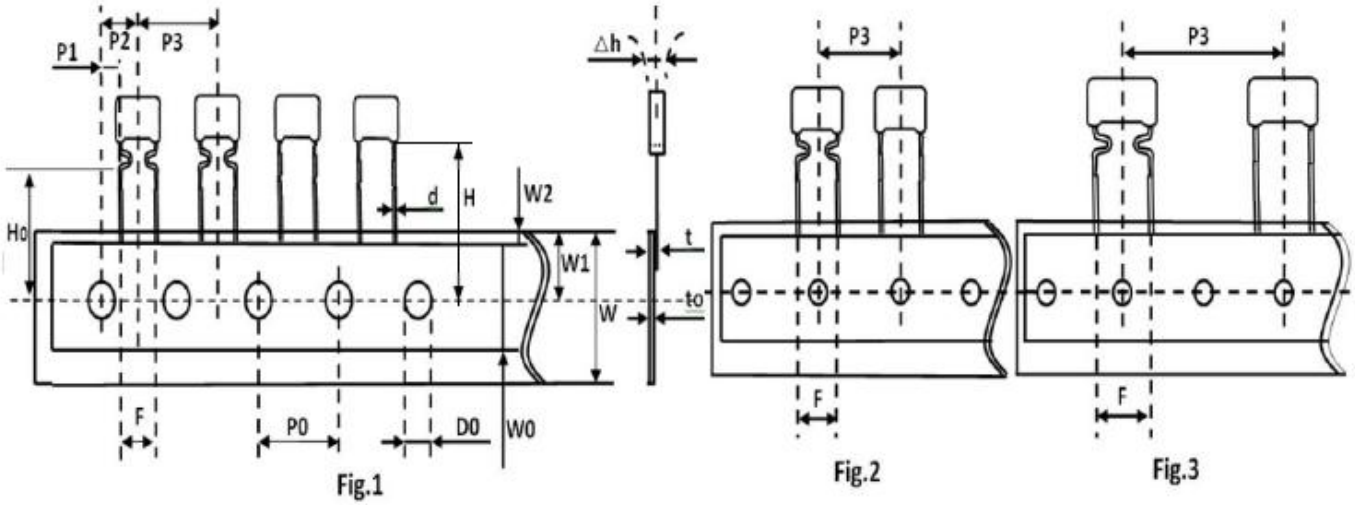
Capacitance (uF)	Rated Voltage	Size (mm)				
		W Max	H Max	T Max	P±1.0	d±0.05
0.047	100VDC	10.0	9.5	5.5	7.5	0.6
	250VDC	10.0	9.5	5.5	7.5	0.6
	400VDC	13.0	9.0	5.5	10.0	0.6
	630VDC	13.0	10.5	6.5	10.0	0.6
0.056	100VDC	10.0	9.0	5.5	7.5	0.6
	250VDC	10.0	9.0	5.5	7.5	0.6
	400VDC	13.0	8.5	5.5	10.0	0.6
	630VDC	13.0	11.5	7.5	10.0	0.6
0.068	100VDC	10.0	9.5	6.0	7.5	0.6
	250VDC	10.0	9.5	6.0	7.5	0.6
	400VDC	13.0	9.5	6.0	10.0	0.6
	630VDC	18.0	11.0	6.0	15.0	0.8
0.1	100VDC	10.0	10.0	6.5	7.5	0.6
	250VDC	10.0	10.0	6.5	7.5	0.6
	400VDC	13.0	10.5	6.0	10.0	0.6
	630VDC	18.0	10.5	7.0	15.0	0.8
0.15	100VDC	13.0	10.5	6.5	10.0	0.6
	250VDC	13.0	10.5	6.5	10.0	0.6
	400VDC	13.0	11.5	7.0	10.0	0.6
	630VDC	18.0	13.0	7.5	15.0	0.8
0.22	100VDC	13.0	11.0	7.0	10.0	0.6
	250VDC	13.0	11.0	7.0	10.0	0.6
	400VDC	18.0	13.0	7.5	15.0	0.8
	630VDC	18.0	14.5	8.5	15.0	0.8
0.33	100VDC	13.0	12.5	8.5	10.0	0.6
	250VDC	13.0	12.5	8.5	10.0	0.6
	400VDC	18.0	14.5	7.0	15.0	0.8
	630VDC	18.0	17.5	10.0	15.0	0.8
0.47	100VDC	18.0	12.5	7.0	15.0	0.8
	250VDC	18.0	12.5	7.0	15.0	0.8
	400VDC	18.0	15.5	8.5	15.0	0.8
	630VDC	23.0	18.5	11.0	20.0	0.8
0.68	100VDC	18.0	14.5	8.0	15.0	.0.8
	250VDC	18.0	14.5	8.0	15.0	0.8
	400VDC	18.0	17.0	10.0	15.0	0.8
	630VDC	25.0	19.5	10.5	22.5	0.8

Capacitance (uF)	Rated Voltage	Size (mm)				
		W Max	H Max	T Max	P±1.0	d±0.05
1.0	100VDC	18.0	16.5	10.0	15.0	0.8
	250VDC	18.0	16.5	10.0	15.0	0.8
	400VDC	23.0	17.5	9.5	20.0	0.8
	630VDC	31.0	21.0	12.5	27.5	0.8
1.5	100VDC	23.0	17.5	9.5	20.0	0.8
	250VDC	23.0	17.5	9.5	20.0	0.8
	400VDC	31.0	17.5	9.0	27.5	0.8
	630VDC	31.0	24.5	14.5	27.5	0.8
2.0	100VDC	23.0	19.5	10.5	20.0	0.8
	250VDC	23.0	19.5	10.5	20.0	0.8
	400VDC	31.0	19.5	10.5	27.5	0.8
2.2	100VDC	23.0	19.5	11.5	20.0	0.8
	250VDC	23.0	19.5	11.5	20.0	0.8
	400VDC	31.0	20.0	11.5	27.5	0.8
3.0	100VDC	31.0	19.5	11.0	27.5	0.8
	250VDC	31.0	19.5	11.0	27.5	0.8
	400VDC	31.0	22.5	13.5	27.5	0.8
3.3	100VDC	31.0	20.0	11.5	27.5	0.8
	250VDC	31.0	20.0	11.5	27.5	0.8
	400VDC	31.0	24.0	14.5	27.5	0.8

Lead Configuration

Lead Style	Drawing	Lead Length L (mm)
Long Straight		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0
Inner Crimped		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0

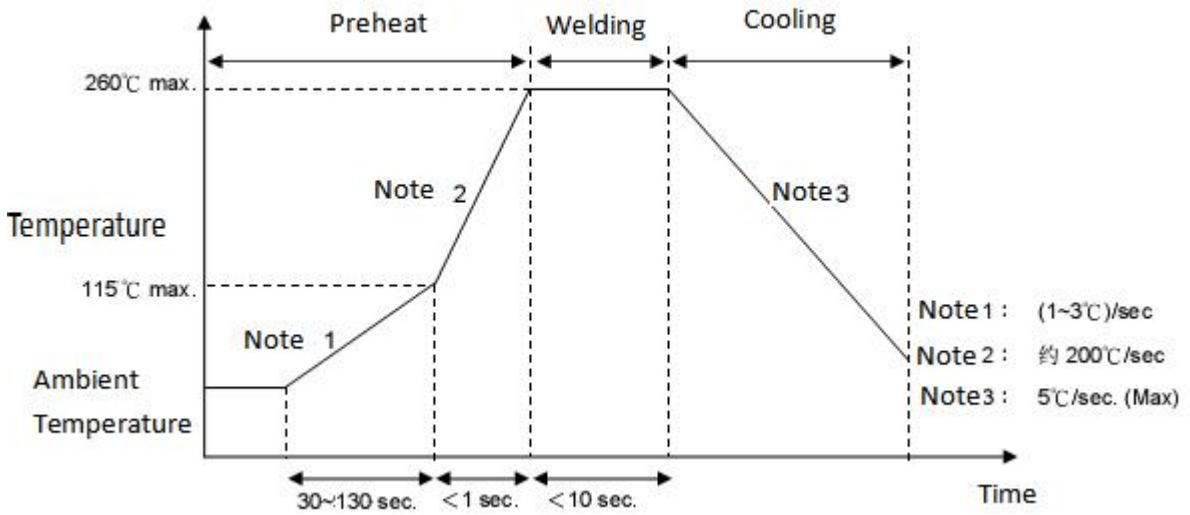
Taping And Dimensions (mm)

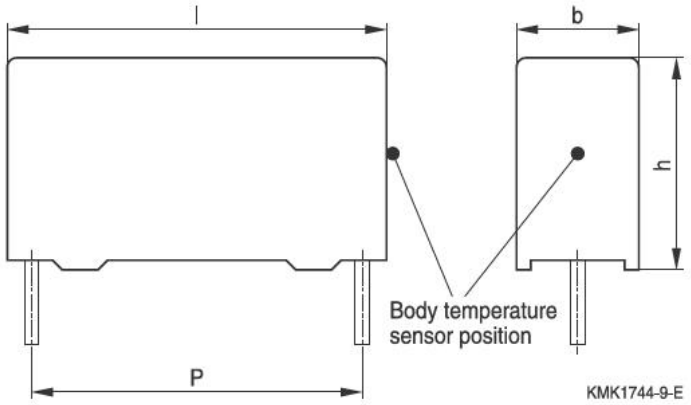


Symbol	Fig.1	Fig.2	Fig.2	Fig.3	Fig.3	Tolerance
	P=5.0	P=7.5	P=10	P=15	P=20/22.5	
P3	12.7	12.7	12.7	25.4	30.0	±1.0
P2	6.35	/	/	/	/	±1.3
P0	12.7	12.7	12.7	12.7	15.0	±0.3
P1	3.85	/	/	/	/	±0.7
F	5.0	7.5	10.0	15.0	20.0/22.5	±1.0
H	20.0	20.0	20.0	20.0	20.0	±1.0
H0	16.5	16.5	16.5	16.5	16.5	±0.5
Δ h	0	0	0	0	0	±2.0
W	18.0	18.0	18.0	18.0	18.0	+1.0/-0.5
W0	12.0	12.0	12.0	12.0	12.0	±1.0
W1	9.0	9.0	9.0	9.0	9.0	±0.5
W2	3.0	3.0	3.0	3.0	3.0	Max
D0	4.0	4.0	4.0	4.0	4.0	±0.3
d	0.5	0.6	0.6	0.8	0.8	±0.05
t	1.0	1.1	1.1	1.4	1.4	±0.2
t0	0.38	0.38	0.38	0.47	0.47	±0.04

Soldering Condition

Wave Soldering Graph





PP:
During pre-heating: Tp ≤110℃
During soldering: Ts ≤120℃, ts ≤15 s
PE:
During pre-heating: Tp ≤125℃
During soldering: Ts ≤160℃, ts ≤15 s

Note: Film capacitor is not suitable for reflow soldering, because it will cause thermal contraction and affect electrical performance.

Iron Soldering Condition

Item	Condition
Temperature of soldering copper bit	350℃（max.）
Soldering duration	3sec（max.）
Space between soldering position and coating layer	2mm（min.）

Storage Conditions

- When store under the atmosphere, the terminal may contact with the substance of hydrochloride, hydrosulfide, sulfuric acid, etc. in the atmosphere, which needs to be paid attention to the deterioration of the solderability of the terminal.
- Product could not be exposed to high humidity and high temperature environment. Please store under below condition with the original packing.

A. Temperature: ≤35℃

B. Himidity: ≤70%RH

C. Storage period: Max 12 months