MPB/CBB21B Metallized Polypropylene Film Capacitors (Box-Type) Data Sheet

Feature

■Wide capacitance range from 0.01uF to 10uF.

■Operating Temperature: -40℃～105℃.

■Storage Temperature: 15℃~35℃.

■Low dissipation factor at high frequency.

■Metallized polypropylene film, flame retardant plastic case and epoxy resin filled.

■High stability of capacitance &DF.

■Self-healing property.

■High insulation resistance.

Applications

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

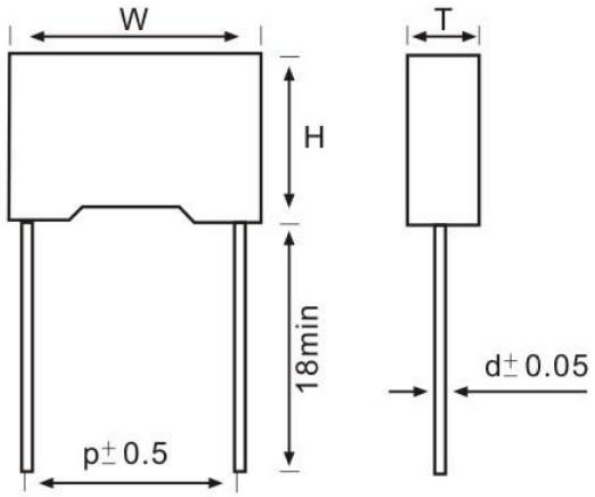
■S-correction circuit for TV sets and monitors.

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.)	IR≥50000MΩ (AT 100VDC、60SEC、20℃)

Dimensions (mm)

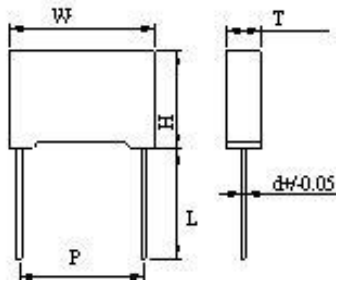
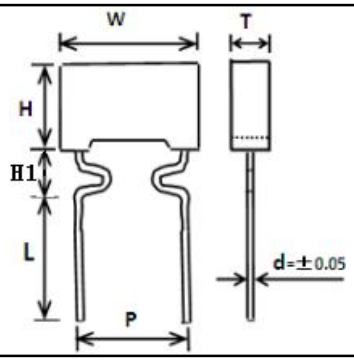


Capacitance (uF)	Rated Voltage	Size (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
0.01	400VDC	10.0	9.0	4.0	7.5	0.6
	630VDC	10.0	11.0	5.0	7.5	0.6
0.012	400VDC	10.0	9.0	4.0	7.5	0.6
	630VDC	10.0	11.0	5.0	7.5	0.6
0.015	400VDC	10.0	9.0	4.0	7.5	0.6
	630VDC	10.0	12.0	6.0	7.5	0.6
0.018	400VDC	10.0	9.0	4.0	7.5	0.6
	630VDC	10.0	12.0	6.0	7.5	0.6
0.022	250VDC	10.0	8.0	4.0	7.5	0.6
	400VDC	10.0	9.0	4.0	7.5	0.6
	630VDC	13.0	11.0	5.5	10.0	0.6
0.027	250VDC	10.0	8.0	4.0	7.5	0.6
	400VDC	10.0	11.0	5.0	7.5	0.6
	630VDC	13.0	12.0	6.0	10.0	0.6
0.033	250VDC	10.0	9.0	4.0	7.5	0.6
	400VDC	10.0	11.0	5.0	7.5	0.6
	630VDC	13.0	13.0	7.0	10.0	0.6
0.039	250VDC	10.0	9.0	4.0	7.5	0.6
	400VDC	13.0	11.0	5.0	10.0	0.6
	630VDC	13.0	13.0	7.0	10.0	0.6

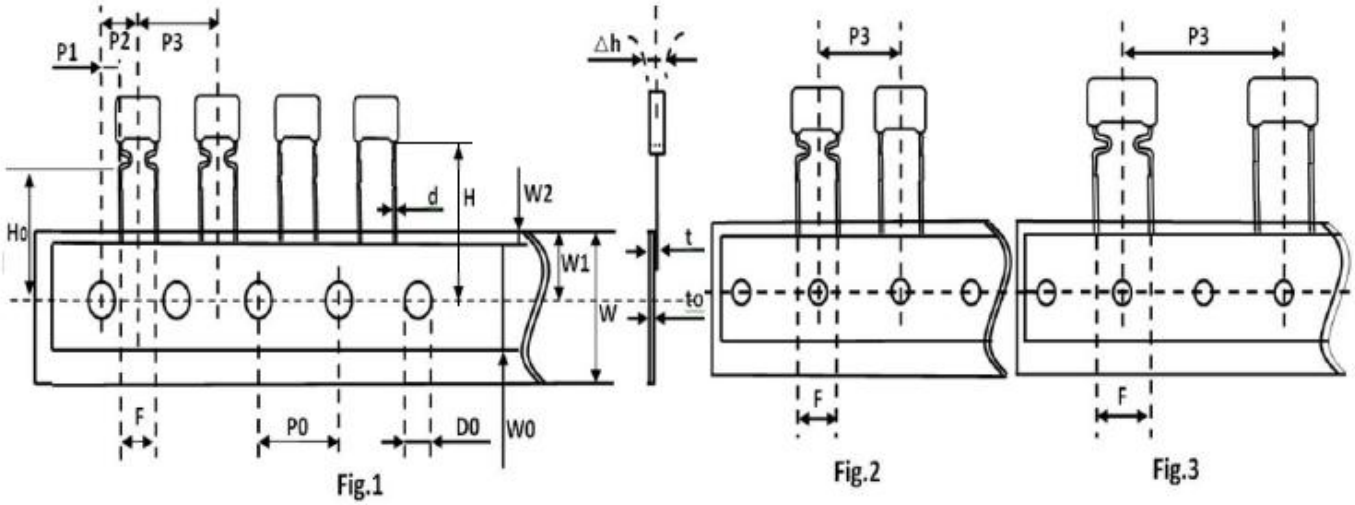
Capacitance (uF)	Rated Voltage	Size (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
0.047	100VDC	10.0	9.0	4.0	7.5	0.6
	250VDC	10.0	11.0	5.0	7.5	0.6
	400VDC	13.0	11.0	5.0	10.0	0.6
	630VDC	13.0	14.0	8.0	10.0	0.6
0.056	100VDC	10.0	9.0	4.0	7.5	0.6
	250VDC	10.0	11.0	5.0	7.5	0.6
	400VDC	13.0	12.0	6.0	10.0	0.6
	630VDC	13.0	14.0	8.0	10.0	0.6
0.068	100VDC	10.0	9.0	4.0	7.5	0.6
	250VDC	10.0	11.0	5.0	7.5	0.6
	400VDC	13.0	13.0	7.0	10.0	0.6
	630VDC	18.0	12.0	6.0	15.0	0.8
0.1	100VDC	10.0	11.0	5.0	7.5	0.6
	250VDC	10.0	12.0	6.0	7.5	0.6
	400VDC	13.0	14.0	8.0	10.0	0.6
	630VDC	18.0	12.0	6.0	15.0	0.8
0.15	100VDC	10.0	12.0	6.0	7.5	0.6
	250VDC	13.0	12.0	6.0	10.0	0.6
	400VDC	18.0	12.0	6.0	15.0	0.8
	630VDC	18.0	13.5	7.5	15.0	0.8
0.22	100VDC	13.0	11.0	5.0	10.0	0.6
	250VDC	13.0	12.0	6.0	10.0	0.6
	400VDC	18.0	12.0	6.0	15.0	0.8
	630VDC	18.0	14.5	8.5	15.0	0.8
0.33	100VDC	13.0	13.0	7.0	10.0	0.6
	250VDC	18.0	12.0	6.0	15.0	0.8
	400VDC	18.0	13.5	7.5	15.0	0.8
	630VDC	18.0	16.0	10.0	15.0	0.8
0.47	100VDC	13.0	14.0	8.0	10.0	0.6
	100VDC	18.0	13.5	7.5	15.0	0.8
	250VDC	18.0	13.5	7.5	15.0	0.8
	400VDC	18.0	14.5	8.5	15.0	0.8
	400VDC	18.0	16.0	10.0	15.0	0.8
	630VDC	26.5	19.0	10.0	22.5	0.8

Capacitance (uF)	Rated Voltage	Size (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
0.68	100VDC	18.0	13.5	7.5	15.0	0.8
	250VDC	18.0	13.5	7.5	15.0	0.8
	400VDC	18.0	16.0	10.0	15.0	0.8
	630VDC	26.5	19.0	10.0	22.5	0.8
1.0	100VDC	18.0	16.0	10.0	15.0	0.8
	250VDC	18.0	16.0	10.0	15.0	0.8
	400VDC	18.0	19.0	11.0	15.0	0.8
	630VDC	32.0	22.0	13.0	27.5	0.8
1.2	100VDC	18	16	10	15	0.8
	250VDC	18	19	11	15	0.8
	400VDC	26.5	19	10	22.5	0.8
	630VDC	31	25	14	27.5	0.8
1.5	100VDC	18	19	11	15	0.8
	250VDC	26.5	21.5	12	22.5	0.8
	400VDC	31	25	14	27.5	0.8
	630VDC	31	25	15	27.5	0.8
2.2	100VDC	18.0	21	12	15.0	0.8
	250VDC	26.5	23	13	22.5	0.8
	400VDC	31.0	25	14	27.5	0.8
3.3	100VDC	26.5	23	13	22.5	0.8
	250VDC	31	25	14	27.5	0.8
	400VDC	31	25	15	27.5	0.8
4.7	100VDC	31.0	25	15	27.5	0.8
	250VDC	32	28	18	27.5	0.8
	400VDC	32	37	22	27.5	0.8
6.8	100VDC	31	25	15	27.5	0.8
	250VDC	32	37	22	27.5	0.8
	400VDC	42	30	17	37.5	0.8
10.0	100VDC	31	28	18	27.5	0.8
	250VDC	31	37	22	27.5	0.8
	400VDC	42	30	17	37.5	0.8

Lead Configuration

Lead Style	Drawing	Lead Length L (mm)	Coating Lead Length H1(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	Pitch P＞10mm:H1＜6.0mm Pitch P≤10mm:H1＜5.0mm

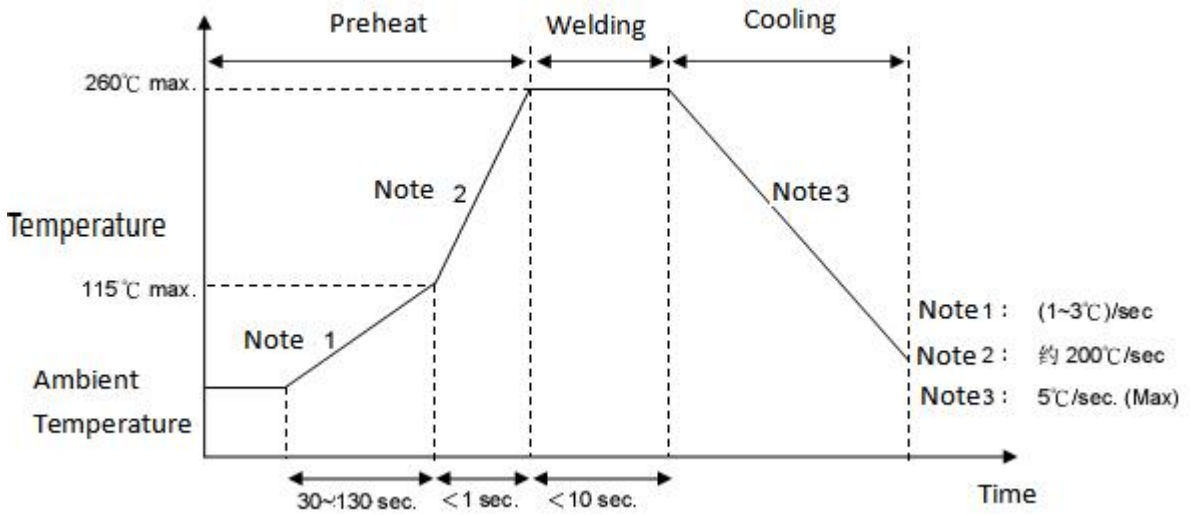
Taping And Dimensions (mm)

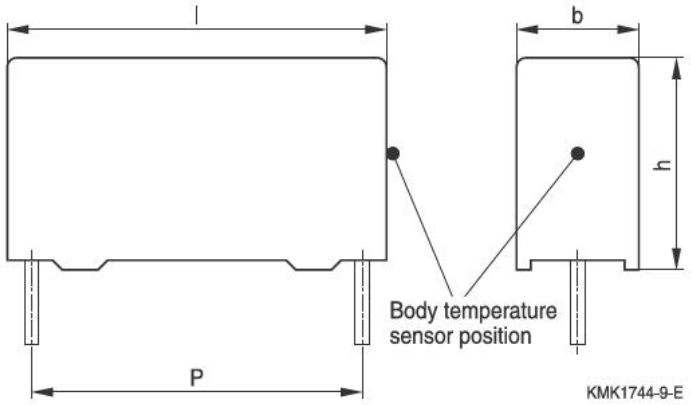


Symbol	Fig.1	Fig.2	Fig.2	Fig.3	Fig.3	Tolerance
	P=5.0	P=7.5	P=10	P=15	P=20/22.5	
P3	12.7	12.7	12.7	25.4	30.0	±1.0
P2	6.35	/	/	/	/	±1.3
P0	12.7	12.7	12.7	12.7	15.0	±0.3
P1	3.85	/	/	/	/	±0.7
F	5.0	7.5	10.0	15.0	20.0/22.5	±1.0
H	20.0	20.0	20.0	20.0	20.0	±1.0
H0	16.5	16.5	16.5	16.5	16.5	±0.5
Δ h	0	0	0	0	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