CBB23B Metallized Polypropylene Film Capacitors (Box-Type) Data Sheet

Feature

■Wide capacitance range from 0.001uF to 0.1uF

■Operating Temperature: -40℃～105℃.

■Storage Temperature: 15℃~35℃.

■Low loss and small inherent temperature rise.

■Metallic polypropylene internal channeling material.

■Excellent active and passive flame resistant abilities.

■Negative temperature coefficient of capacitance.

Applications

■Widely used in high voltage, high frequency pulse circuit.

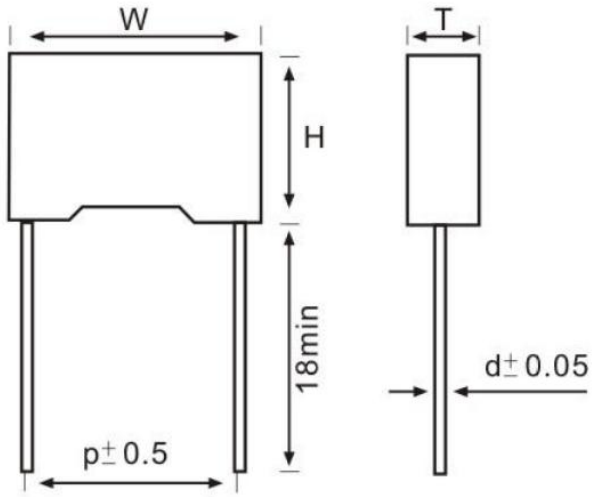
■Electronic lighting (such as electronic rectifier).

Part numbering on request.

Specifications

Climatic Category	40/100/21
Rated Voltage	400VAC(1000VDC)、500VAC(1200VDC)、 700VAC(1600VDC)、900VAC(2000VDC)
Dissipation Factor (tanδ)	≤0.1%(1KHz、1.0Vrms、20℃)
Withstand Voltage	$1.6U_R$ (5s)
Insulation Resistance (I.R.)	C≤0.33 uF ,R≥50000MΩ C＞0.33 uF ,R≥15000S Note：T[s]=I.R.[MΩ]*CN [μF] (AT 100VDC、60SEC、20℃)

Dimensions (mm)

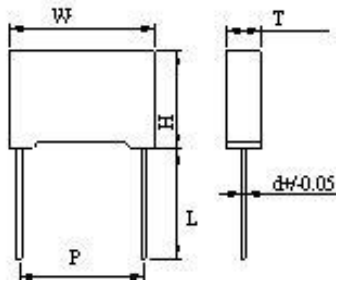
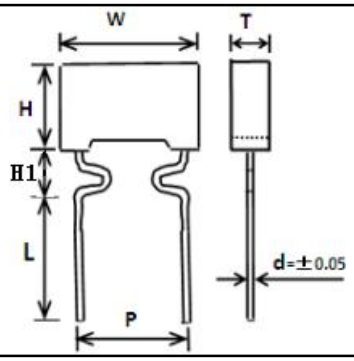


Capacitance (uF)	Rated Voltage	Size (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
0.001	400VAC	13.0	9.0	4.0	10.0	0.6
	500VAC	18.0	11.0	5.0	15.0	0.8
	700VAC	18.0	11.0	5.0	15.0	0.8
	900VAC	18.0	11.0	5.0	15.0	0.8
0.0012	400VAC	13.0	9.0	4.0	10.0	0.6
	500VAC	18.0	11.0	5.0	15.0	0.8
	700VAC	18.0	11.0	5.0	15.0	0.8
	900VAC	18.0	12.0	6.0	15.0	0.8
0.0015	400VAC	13.0	9.0	4.0	10.0	0.6
	500VAC	18.0	11.0	5.0	15.0	0.8
	700VAC	18.0	11.0	5.0	15.0	0.8
	900VAC	18.0	12.0	6.0	15.0	0.8
0.0018	400VAC	13.0	9.0	4.0	10.0	0.6
	500VAC	18.0	11.0	5.0	15.0	0.8
	700VAC	18.0	11.0	5.0	15.0	0.8
	900VAC	18.0	13.5	7.5	15.0	0.8
0.0022	400VAC	13.0	9.0	4.0	10.0	0.6
	500VAC	18.0	11.0	5.0	15.0	0.8
	700VAC	18.0	11.0	5.0	15.0	0.8
	900VAC	18.0	13.5	7.5	15.0	0.8

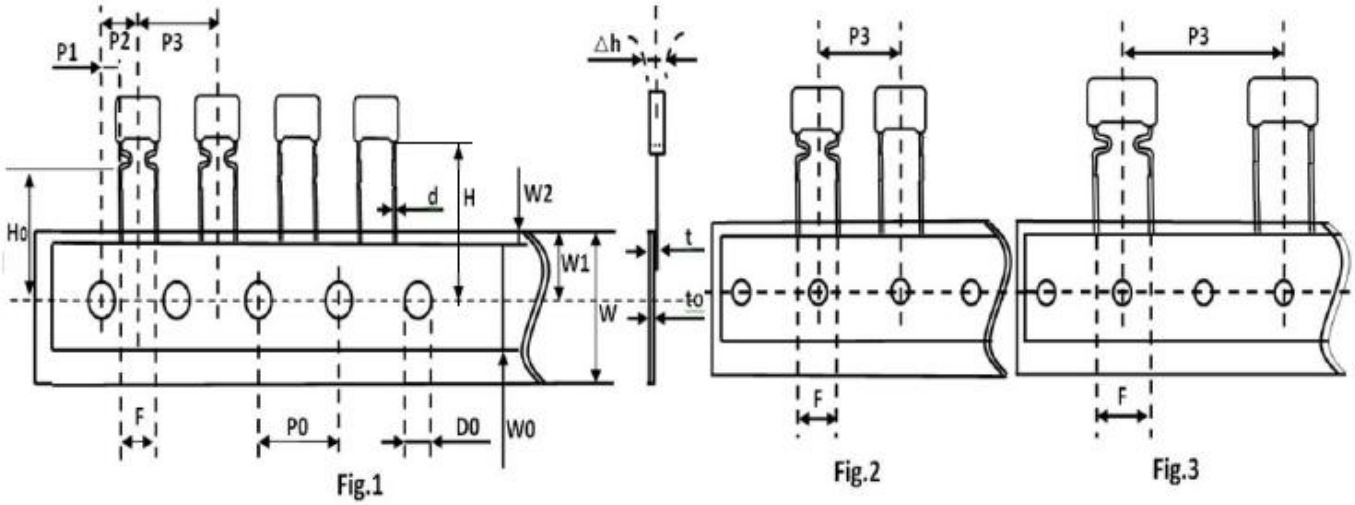
Capacitance (uF)	Rated Voltage	Size (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
0.0027	400VAC	13.0	10.0	5.0	10.0	0.6
	500VAC	18.0	11.0	5.0	15.0	0.8
	700VAC	18.0	11.0	5.0	15.0	0.8
	900VAC	18.0	14.5	8.5	15.0	0.8
0.0033	400VAC	13.0	10.0	5.0	10.0	0.6
	500VAC	18.0	11.0	5.0	15.0	0.8
	700VAC	18.0	11.0	5.0	15.0	0.8
	900VAC	18.0	16.0	10.0	15.0	0.8
0.0039	400VAC	13.0	11.0	5.0	10.0	0.6
	500VAC	18.0	11.0	5.0	15.0	0.8
	700VAC	18.0	12.0	6.0	15.0	0.8
	900VAC	18.0	18.0	10.0	15.0	0.8
0.0047	400VAC	13.0	11.0	5.5	10.0	0.6
	500VAC	18.0	11.0	5.0	15.0	0.8
	700VAC	18.0	12.0	6.0	15.0	0.8
	900VAC	18.0	18.0	10.0	15.0	0.8
0.0056	400VAC	13.0	12.0	6.0	10.0	0.6
	500VAC	18.0	11.0	5.0	15.0	0.8
	700VAC	18.0	13.0	7.0	15.0	0.8
	900VAC	18.0	19.0	12.0	15.0	0.8
0.0068	400VAC	18.0	11.0	5.0	15.0	0.8
	500VAC	18.0	12.0	6.0	15.0	0.8
	700VAC	18.0	13.5	7.5	15.0	0.8
	900VAC	26.0	16.5	7.0	22.5	0.8
0.0082	400VAC	18.0	11.0	5.0	15.0	0.8
	500VAC	18.0	13.5	7.5	15.0	0.8
	700VAC	18.0	14.0	8.0	15.0	0.8
	900VAC	26.0	16.5	7.0	22.5	0.8
0.01	400VAC	18.0	11.0	5.0	15.0	0.8
	500VAC	18.0	13.5	7.5	15.0	0.8
	700VAC	18.0	14.5	8.5	15.0	0.8
	900VAC	26.0	16.5	7.0	22.5	0.8
0.012	400VAC	18.0	12.0	6.0	15.0	0.8
	500VAC	18.0	13.5	7.5	15.0	0.8
	700VAC	18.0	16.0	10.0	15.0	0.8
	900VAC	26.0	17.0	8.5	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
0.015	400VAC	18.0	12.0	6.0	15.0	0.8
	500VAC	18.0	14.5	8.5	15.0	0.8
	700VAC	18.0	16.0	10.0	15.0	0.8
	900VAC	26.0	19.0	10.0	22.5	0.8
0.018	400VAC	18.0	13.0	7.0	15.0	0.8
	500VAC	18.0	14.5	8.5	15.0	0.8
	700VAC	18.0	19.0	11.0	15.0	0.8
	900VAC	26.0	20.0	11.0	22.5	0.8
0.022	400VAC	18.0	13.5	7.5	15.0	0.8
	500VAC	18.0	16.0	10.0	15.0	0.8
	700VAC	26.0	17.0	8.0	22.5	0.8
0.027	400VAC	18.0	14.5	8.5	15.0	0.8
	500VAC	18.0	18.0	10.0	15.0	0.8
	700VAC	26.0	18.0	9.0	22.5	0.8
0.033	400VAC	18.0	15.0	9.0	15.0	0.8
	500VAC	26.0	17.0	8.0	22.5	0.8
	700VAC	26.0	18.5	10.0	22.5	0.8
0.039	400VAC	18.0	16.0	10.0	15.0	0.8
	500VAC	26.0	19.0	10.0	22.5	0.8
	700VAC	26.0	20.0	11.0	22.5	0.8
0.047	400VAC	18.0	17.5	11.0	15.0	0.8
	500VAC	26.0	19.0	10.0	22.5	0.8
	700VAC	26.0	20.0	11.0	22.5	0.8
0.056	400VAC	26.0	17.0	8.5	22.5	0.8
	500VAC	26.0	19.0	10.0	22.5	0.8
0.068	400VAC	26.0	18.0	9.0	22.5	0.8
	500VAC	26.0	20.0	11.0	22.5	0.8
0.082	400VAC	26.0	19.0	10.0	22.5	0.8
	500VAC	26.0	22.0	12.5	22.5	0.8
0.1	400VAC	26.0	20.0	11.0	22.5	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

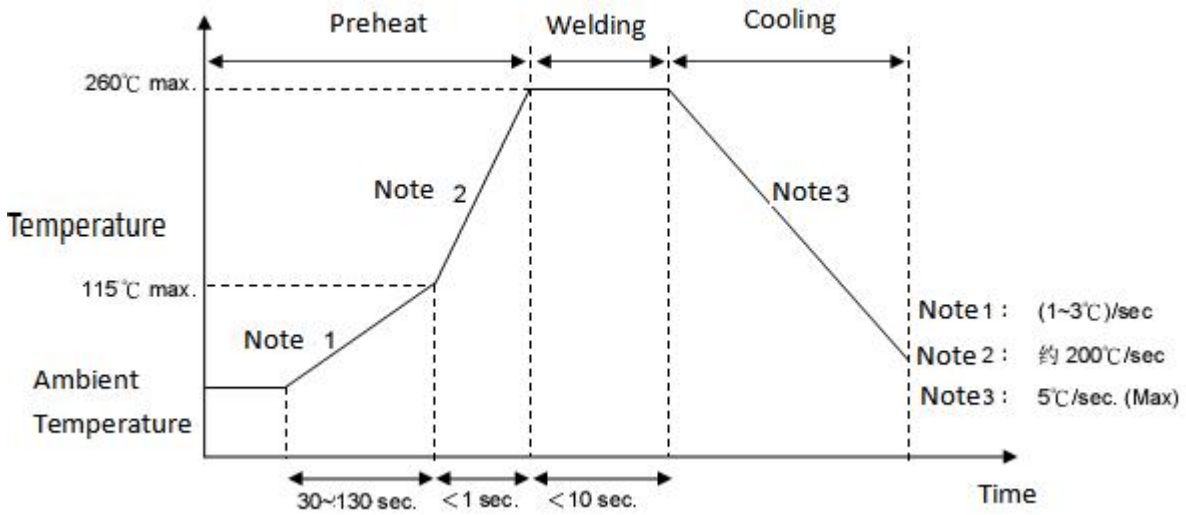
Taping And Dimensions (mm)

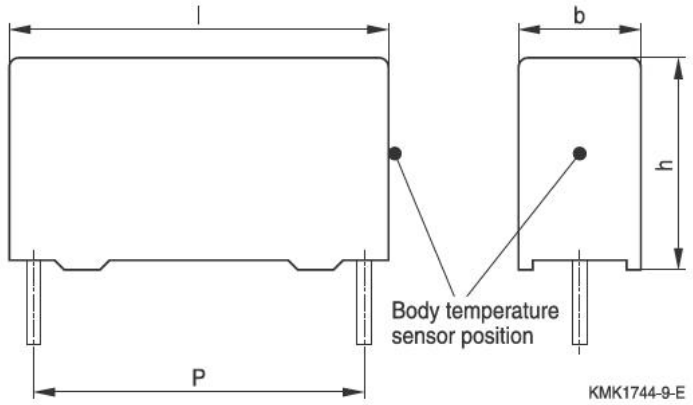


Symbol	Fig.1	Fig.2	Fig.2	Fig.3	Fig.3	Tolerance
	P=5.0	P=7.5	P=10	P=15	P=20/22.5	
P3	12.7	12.7	12.7	25.4	30.0	±1.0
P2	6.35	/	/	/	/	±1.3
P0	12.7	12.7	12.7	12.7	15.0	±0.3
P1	3.85	/	/	/	/	±0.7
F	5.0	7.5	10.0	15.0	20.0/22.5	±1.0
H	20.0	20.0	20.0	20.0	20.0	±1.0
H0	16.5	16.5	16.5	16.5	16.5	±0.5
Δ h	0	0	0	0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