

Film Capacitors

Metallized Polypropylene Film Capacitor

Series/Type: CBB21

Ordering code: CB2*

Date: September 2024

Version: 01

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■ Features

- Metallized polypropylene film
- Low loss at high frequency
- Small inherent temperature rise
- Flame retardant epoxy resin powder coating(UL 94 V-0)

■ Typical Applications

- Widely used in high frequency, DC, AC and pulse circuits
- Suitable for S-correction circuits of large screen monitor
- Suitable for the situation where applies high frequency and high current pulse

■ Reference Standards

- GB/T 10190(IEC 60384-16)
- UL 810

■ Specifications

- Capacitance range 0.001μF...3.3μF
- Capacitance tolerance ±5%(J), ±10%(K), ±20%(M)
- Rated Voltage 100V, 400/450V, 630V, 1000V, 1250V
- Loss factor(tanδ)at 1KHz ≤2.0×10⁻³
- Maximum pulse rise time(dv/dt)

U _R (V)	dv/dt(v/μs)			
	P=7.5	P=10	P=15	P=22.5
100/250	600	550	300	120
400/450	900	750	550	250
630	1500	1200	800	350
1000/1250	2500	1200		

- Climatic category 40/105/21
- Rared temperature 85℃
- Operating temperature range -40℃...105℃
- Storage temperature Range (85℃ to 105℃, decreasing fator 1.25% per ℃ for U_R)
-40℃...105℃

■ Test data

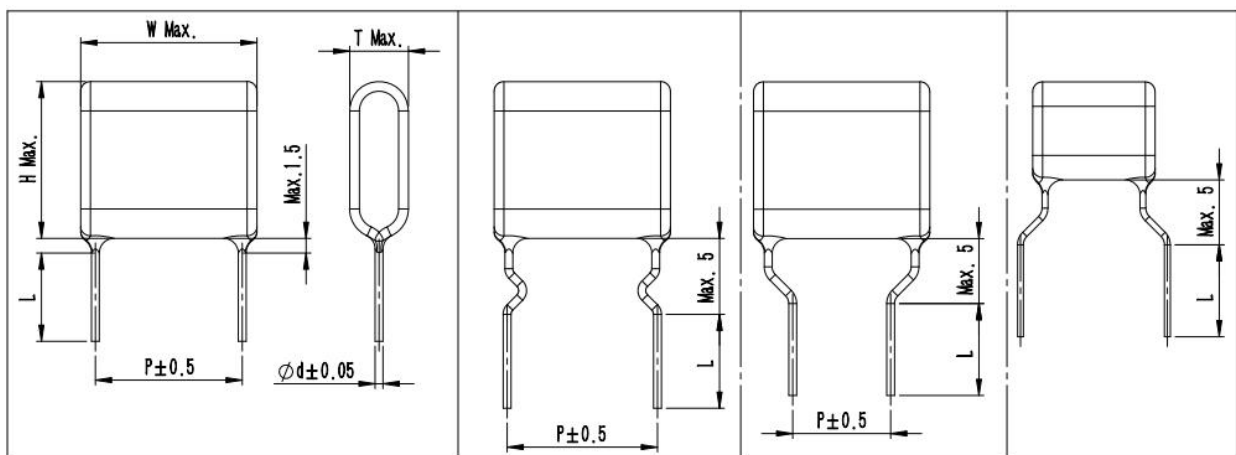
- Capacitance measurement C_R±5%(J); C_R±10%(K); C_R±20%(M)
- Test voltage between terminals 1.6U_R@5S
- Insulation resistance R≥100,000MΩ, C_R≤0.33μF(20℃, 100V, 60S)
R•C_R≥30,000S, C_R>0.33μF(20℃, 100V, 60S)
- Loss factor(tanδ)at 1KHz 20×10⁻⁴

■ **Structure of ordering code**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
C	B	2	3	1	1	2	2	5	K	6	3	5	L	0	1	G	1
A		B			C			D	E	F		G	H	I	J	K	

- A: Capacitor series
CB2=CBB21
- B: Rated voltage
如: 631=63*10¹=630V
- C: Rated capacitance
如: 225=22*10⁵=2200000pF=2.2μF
- D: Capacitance tolerance
±2%(G), ±3%(H), ±5%(J), ±10%(K), ±20%(M)
- E: Pitch
2=5.0mm 3=7.5mm 4=10mm 5=12.5mm 6=15mm 9=22.5mm
B=27.5mm D=32.5mm F=37.5mm M=52.5mm
- F: Lead length
35=3.5mm E5=15mm N2=22mm S6=36mm
- G: Pin shape
L=Straight foot R=Right foot K=K foot N=Bend inward foot
W=Bend outside foot
- H: Product features
0=Ordinary 1=Double 85 2=Low noise 3=Low power
- I: Raw material
0=No halogen 1=halogen
- J: Product colour
Y=Yellow G=Grey B=Black U=Blue W=white R=Red E=Green
- H: Inner use

■ **Outline Drawing(Specific according to customer requirements)**



Dimensions(mm)

U _R : 100V.dc(63V.ac)/250V.dc(160V.ac)							U _R : 100V.dc(63V.ac)/250V.dc(160V.ac)						
Cr(μF)	W	H	T	d	P	Part number	Cr(μF)	W	H	T	d	P	Part number
0.010	10	8	4	0.6	7.5		0.20	12.5	9.5	5.9	0.6	10	
0.011	10	8	4.5	0.6	7.5		0.22	12.5	9.8	6.1	0.6	10	
0.012	10	8	4.5	0.6	7.5		0.24	12.5	10	6.5	0.6	10	
0.013	10	8	4.5	0.6	7.5		0.27	17.5	10.5	5.3	0.75	15	
0.015	10	8	4.5	0.6	7.5		0.30	17.5	10.8	5.5	0.75	15	
0.016	10	8	4.5	0.6	7.5		0.33	17.5	11	5.8	0.75	15	
0.018	10	8.1	4.5	0.6	7.5		0.36	17.5	11.2	6	0.75	15	
0.020	10	8.2	4.6	0.6	7.5		0.39	17.5	11.4	6.2	0.75	15	
0.022	10	8.5	5	0.6	7.5		0.43	17.5	11.6	6.4	0.75	15	
0.024	10	8.6	5	0.6	7.5		0.47	17.5	11.9	6.6	0.75	15	
0.027	10	7.7	4.1	0.6	7.5		0.51	17.5	12.1	6.9	0.75	15	
0.030	10	7.7	4.2	0.6	7.5		0.56	17.5	12.4	7.2	0.75	15	
0.033	10	8	4.3	0.6	7.5		0.62	17.5	12.7	7.5	0.75	15	
0.036	10	8	4.5	0.6	7.5		0.68	17.5	13.5	7.8	0.75	15	
0.039	10	8.1	4.5	0.6	7.5		0.75	17.5	13.9	8.2	0.75	15	
0.043	10	8.3	4.8	0.6	7.5		0.82	17.5	14.2	8.5	0.75	15	
0.047	10	8.5	4.8	0.6	7.5		0.91	17.5	14.9	8.9	0.75	15	
0.051	12.5	8	4.3	0.6	10		1.0	17.5	15	9.3	0.75	15	
0.056	12.5	8.2	4.5	0.6	10		1.1	17.5	15.5	9.7	0.75	15	
0.062	12.5	8.3	4.6	0.6	10		1.2	25.5	14.8	7.5	0.75	22.5	
0.068	12.5	8.5	4.8	0.6	10		1.3	25.5	15.1	7.8	0.75	22.5	
0.075	12.5	8.6	5	0.6	10		1.5	25.5	15.6	8.5	0.75	22.5	
0.082	12.5	8.8	5.2	0.6	10		1.6	25.5	16	9	0.75	22.5	
0.091	12.5	8.1	4.5	0.6	10		1.8	25.5	16.5	9.1	0.75	22.5	
0.10	12.5	8.3	4.7	0.6	10		2.0	25.5	17	10.2	0.75	22.5	
0.11	12.5	8.5	4.8	0.6	10		2.2	25.5	18.3	10	0.75	22.5	
0.12	12.5	8.6	5	0.6	10		2.4	25.5	18.7	10.5	0.75	22.5	
0.13	12.5	8.6	5	0.6	10		2.7	25.5	19.3	11	0.75	22.5	
0.15	12.5	8.9	5.2	0.6	10		3.0	25.5	20	12	0.75	22.5	
0.16	12.5	9	5.4	0.6	10		3.3	25.5	20.5	12.1	0.75	22.5	
0.18	12.5	9.3	5.6	0.6	10								

Dimensions(mm)

UR: 400V.dc/450V.dc(200V.ac)							UR: 400V.dc/450V.dc(200V.ac)						
Cr(μF)	W	H	T	d	P	Part number	Cr(μF)	W	H	T	d	P	Part number
0.010	10	7.8	4.1	0.6	7.5		0.12	17.5	10.7	5.5	0.75	15	
0.011	10	8	4.3	0.6	7.5		0.13	17.5	10.9	5.7	0.75	15	
0.012	10	8	4.3	0.6	7.5		0.15	17.5	11.2	6	0.75	15	
0.013	10	8.1	4.5	0.6	7.5		0.16	17.5	11.3	6.1	0.75	15	
0.015	10	8.4	4.7	0.6	7.5		0.18	17.5	11.6	6.4	0.75	15	
0.016	10	8.5	4.8	0.6	7.5		0.20	17.5	11.9	6.7	0.75	15	
0.018	10	8.7	5.0	0.6	7.5		0.22	17.5	12.2	7	0.75	15	
0.020	10	9	5.3	0.6	7.5		0.24	17.5	12.5	7.3	0.75	15	
0.022	10	9.1	5.5	0.6	7.5		0.27	17.5	12.9	7.6	0.75	15	
0.024	12.5	8	4.3	0.6	10		0.30	17.5	13.7	8.0	0.75	15	
0.027	12.5	8.1	4.5	0.6	10		0.33	17.5	14.1	8.5	0.75	15	
0.030	12.5	8.3	4.7	0.6	10		0.36	17.5	14.4	8.7	0.75	15	
0.033	12.5	8.5	4.8	0.6	10		0.39	17.5	14.7	9	0.75	15	
0.036	12.5	8.6	5	0.6	10		0.43	17.5	15.1	9.4	0.75	15	
0.039	12.5	8.7	5.1	0.6	10		0.47	17.5	15.5	9.8	0.75	15	
0.043	12.5	8.8	5.2	0.6	10		0.51	25.5	14.8	7.6	0.75	22.5	
0.051	12.5	9.2	5.6	0.6	10		0.56	25.5	15.2	7.9	0.75	22.5	
0.056	12.5	9.4	5.8	0.6	10		0.62	25.5	15.6	8.3	0.75	22.5	
0.062	12.5	8.9	5.2	0.6	10		0.68	25.5	16	9.1	0.75	22.5	
0.068	12.5	9.1	5.4	0.6	10		0.75	25.5	16.3	9.6	0.75	22.5	
0.075	12.5	9.3	5.7	0.6	10		0.82	25.5	16.7	10	0.75	22.5	
0.082	12.5	9.5	5.9	0.6	10		0.91	25.5	17.2	10.5	0.75	22.5	
0.091	12.5	9.8	6.1	0.6	10		1.0	25.5	17.7	10.9	0.75	22.5	
0.10	12.5	10	6.5	0.6	10								
UR: 630V.dc(220V.ac)							UR: 630V.dc(220V.ac)						
0.0010	10	7.9	4.3	0.6	7.5		0.0024	10	8	4.3	0.6	7.5	
0.0011	10	8.1	4.5	0.6	7.5		0.0027	10	8.1	4.5	0.6	7.5	
0.0012	10	8.2	4.5	0.6	7.5		0.0030	10	8.3	4.7	0.6	7.5	
0.0013	10	8.3	4.7	0.6	7.5		0.0033	10	8.5	4.8	0.6	7.5	
0.0015	10	8.1	4.4	0.6	7.5		0.0036	10	8.0	4.4	0.6	7.5	
0.0016	10	8.2	4.5	0.6	7.5		0.0039	10	8.2	4.5	0.6	7.5	
0.0018	10	7.8	4.2	0.6	7.5		0.0043	10	8.3	4.7	0.6	7.5	
0.0020	10	8	4.3	0.6	7.5		0.0051	10	8.6	5	0.6	7.5	
0.0022	10	8.1	4.5	0.6	7.5		0.0056	10	8.8	5.2	0.6	7.5	

Dimensions(mm)

UR: 630V.dc(220V.ac)							UR: 630V.dc(220V.ac)						
Cr(μF)	W	H	T	d	P	Part number	Cr(μF)	W	H	T	d	P	Part number
0.0062	10	9	5.5	0.6	7.5		0.068	17.5	11.7	6.5	0.75	15	
0.0068	12.5	8	4.5	0.6	10		0.075	17.5	11.9	6.7	0.75	15	
0.0075	12.5	8.2	4.5	0.6	10		0.082	17.5	12.2	7.0	0.75	15	
0.0082	12.5	8.3	4.7	0.6	10		0.091	17.5	12.5	7.3	0.75	15	
0.0091	12.5	8.5	4.9	0.6	10		0.10	17.5	12.8	7.6	0.75	15	
0.010	12.5	7.8	4.1	0.6	10		0.11	17.5	13.6	7.9	0.75	15	
0.011	12.5	7.9	4.2	0.6	10		0.12	17.5	13.9	8.2	0.75	15	
0.012	12.5	8	4.4	0.6	10		0.13	17.5	14.2	8.5	0.75	15	
0.013	12.5	8.1	4.5	0.6	10		0.15	17.5	14.7	9	0.75	15	
0.015	12.5	8.3	4.7	0.6	10		0.16	17.5	15.0	9.3	0.75	15	
0.016	12.5	8.5	4.8	0.6	10		0.018	17.5	15.5	9.8	0.75	15	
0.020	12.5	8.8	5.1	0.6	10		0.20	17.5	16	10.3	0.75	15	
0.022	12.5	8.9	5.3	0.6	10		0.22	25.5	15.2	7.9	0.75	22.5	
0.024	12.5	9.1	5.5	0.6	10		0.24	25.5	15.5	8.2	0.75	22.5	
0.027	12.5	9.4	5.7	0.6	10		0.27	25.5	15.9	9.2	0.75	22.5	
0.030	12.5	9.6	6.0	0.6	10		0.30	25.5	16.4	9.6	0.75	22.5	
0.033	12.5	9.9	6.2	0.6	10		0.33	25.5	16.8	10	0.75	22.5	
0.036	12.5	10.1	6.4	0.6	10		0.36	25.5	17.2	10.4	0.75	22.5	
0.039	12.5	10.3	6.7	0.6	10		0.39	25.5	17.6	10.8	0.75	22.5	
0.043	17.5	10.7	5.5	0.75	15		0.43	25.5	18.1	11.3	0.75	22.5	
0.047	17.5	10.8	5.6	0.75	15		0.47	25.5	18.6	11.8	0.75	22.5	
0.051	17.5	11	5.8	0.75	15		0.51	25.5	19	12.2	0.75	22.5	
0.056	17.5	11.2	6.0	0.75	15		0.56	25.5	19.6	12.8	0.75	22.5	
0.062	17.5	11.4	6.2	0.75	15								
UR: 1000V.dc/1250V.dc(220V.ac)							UR: 1000V.dc/1250V.dc(220V.ac)						
0.0010	10	8	4.5	0.6	7.5		0.0024	10	7.7	4	0.6	7.5	
0.0011	10	8.1	4.5	0.6	7.5		0.0027	10	7.8	4.2	0.6	7.5	
0.0012	10	8.2	4.5	0.6	7.5		0.0030	10	8.0	4.4	0.6	7.5	
0.0013	10	8.3	4.7	0.6	7.5		0.0033	10	8.2	4.5	0.6	7.5	
0.0015	10	8.1	4.4	0.6	7.5		0.0036	10	8.3	4.7	0.6	7.5	
0.0016	10	8.2	4.5	0.6	7.5		0.0039	10	8.4	4.8	0.6	7.5	
0.0018	10	7.8	4.2	0.6	7.5		0.0043	10	8.2	4.5	0.6	7.5	
0.0020	10	8	4.3	0.6	7.5		0.0047	10	8.3	4.7	0.6	7.5	
0.0022	10	8.1	4.5	0.6	7.5		0.0051	10	8.5	4.8	0.6	7.5	

Film Capacitors	CB2*
Metallized Polypropylene Film Capacitor	CBB21

Dimensions(mm)

UR: 1000V.dc/1250V.dc(220V.ac)							UR: 1000V.dc/1250V.dc(220V.ac)						
CR(μ F)	W	H	T	d	P	Part number	CR(μ F)	W	H	T	d	P	Part number
0.0056	10	8.7	5.0	0.6	7.5		0.0082	12.5	9.3	5.6	0.75	7.5	
0.0062	10	8.7	5.0	0.6	7.5		0.0091	12.5	9.5	5.9	0.75	7.5	
0.0068	12.5	8.9	5.2	0.75	7.5		0.010	12.5	9.9	6.3	0.75	7.5	
0.0075	12.5	9.1	5.4	0.75	7.5								