

CPB Series

Features

- $\phi 6.3 \sim \phi 10$, 105°C, 2000 hours assured
- Ultra low ESR and high ripple current
- Solid Electrolytic Capacitors of Radial type
- RoHS compliant, REACH & SVHC compliant



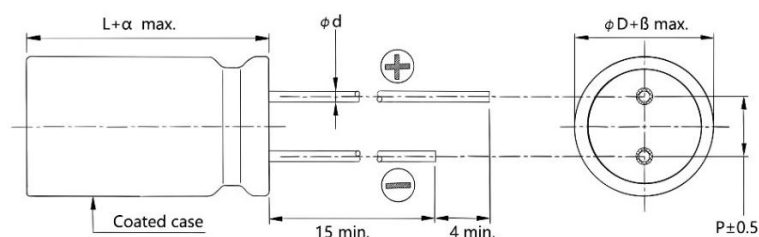
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Specifications					
Category temp. range	-55°C to +105°C				
Capacitance tolerance	±20% (120 Hz / +20 °C)				
Leakage current	Rated voltage applied, after 2 minutes at 20°C. Please see the attached characteristics list				
Tan δ	Please see the attached characteristics list				
ESR	Please see the attached characteristics list				
Characteristics at low temperature	Z (-25 °C) / Z (+20 °C) ≤1.15			Max. Impedance ratio at 100 kHz	
	Z (-55 °C) / Z (+20 °C) ≤1.25				
Endurance	Test Time	2000H			
	Capacitance change	Within ±20% of the initial value			
	Dissipation factor (tan δ)	Less than 150% of the initial value			
	ESR	Less than 150% of the initial value			
	Leakage current	Within the initial limit			
	The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 2,000hours at 105°C.				
Moisture Resistance	Test Time	1000H			
	Capacitance change	Within ±20% of the initial value			
	Dissipation factor (tan δ)	Less than 150% of the initial value			
	ESR	Less than 150% of the initial value			
	Leakage current	Within the initial limit			
	The above specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them at 60°C, 90 ~ 95%RH for 1,000 hours. Leakage current should be tested after voltage treatment*.				
Resistance to soldering heat	After reflow soldering and then being stabilized at +20 °C, capacitors shall meet the following limits.				
	Capacitance change	Within ±10% of the initial value			
	Dissipation factor (tan δ)	Within the initial limit			
	ESR	Within the initial limit			
	Leakage current	Within the initial limit			
Ripple Current and Frequency Multipliers	Frequency	120≤ f <1k	1k≤ f <10k	10k≤ f <100k	100k≤ f <500k
	Multiplier	0.05	0.3	0.7	1.0

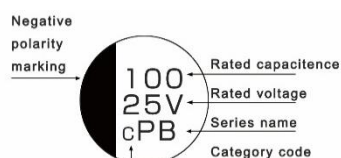
* For any doubt about measured values, measure the leakage current again after the following voltage treatment.

Voltage treatment: DC rated voltage is applied to the capacitors for 2 hours at 105 °C.

Dimensions:



Marking:



Dimensions					Unit: mm
ϕD	L	P	ϕd	α	β
6.3	6	2.5	0.5	1.5	0.5
6.3	8	2.5	0.6	1.5	0.5
6.3	11	2.5	0.6	1.5	0.5
6.3	14	2.5	0.6	1.5	0.5
8	8	3.5	0.6	1.5	0.5
8	12	3.5	0.6	1.5	0.5
8	16	3.5	0.6	1.5	0.5
10	12	5.0	0.6	1.5	0.5
10	16	5.0	0.6	1.5	0.5

Characteristics list

Rated voltage (V)	Capacitance (±20%) (μF)	Case size		Specification				Part Number④
		øD (mm)	L (mm)	Rated ripple current① (mA rms)	ESR② (mΩ)	tan δ③	L.C. (μA)	
2.5	560	6.3	6	3600	13	0.12	280	CPB0E561M0606□□
	820	6.3	8	5900	7	0.12	410	CPB0E821M0608□□
		8	8	5900	7	0.12	410	CPB0E821M0808□□
	1000	6.3	8	5600	7	0.12	500	CPB0E102M0608□□
	1500	8	8	6100	7	0.12	750	CPB0E152M0808□□
	2200	8	12	6700	8	0.12	1100	CPB0E222M0812□□
	3900	10	12	7000	8	0.12	1950	CPB0E392M1012□□
4	330	6.3	6	2200	22	0.12	264	CPB0G331M0606□□
	560	6.3	8	5000	7	0.12	448	CPB0G561M0608□□
	820	8	8	6100	6	0.12	656	CPB0G821M0808□□
	1200	8	12	5700	7	0.12	960	CPB0G122M0812□□
	2200	10	12	6100	7	0.12	1760	CPB0G222M1012□□
6.3	330	6.3	6	3200	15	0.12	415	CPB0J331M0606□□
	470	6.3	8	5000	8	0.12	592	CPB0J471M0608□□
	560	6.3	8	5000	8	0.12	705	CPB0J561M0608□□
	680	6.3	8	5900	9	0.12	856	CPB0J681M0608□□
	1000	6.3	11	5100	10	0.12	1260	CPB0J102M0611□□
		8	8	5700	8	0.12	1260	CPB0J102M0808□□
	1200	6.3	14	5600	8	0.12	1512	CPB0J122M0614□□
		8	12	5900	9	0.12	1512	CPB0J122M0812□□
	1500	8	12	5700	7	0.12	1890	CPB0J152M0812□□
	2200	10	12	6600	8	0.12	2772	CPB0J222M1012□□
10	220	6.3	6	2500	25	0.12	440	CPB1A221M0606□□
	330	6.3	8	4500	15	0.12	660	CPB1A331M0608□□
		8	8	4620	12	0.12	660	CPB1A331M0808□□
	470	6.3	8	4800	13	0.12	940	CPB1A471M0608□□
	680	8	8	5100	11	0.12	1360	CPB1A681M0808□□
	1000	8	12	5800	10	0.12	2000	CPB1A102M0812□□
	1500	10	12	6200	9	0.12	3000	CPB1A152M1012□□
16	2200	10	12	6500	9	0.12	4400	CPB1A222M1012□□
	100	6.3	6	3250	16	0.12	320	CPB1C101M0606□□
	220	6.3	8	4500	12	0.12	704	CPB1C221M0608□□
	270	6.3	8	4500	12	0.12	864	CPB1C271M0608□□
	330	6.3	8	4500	12	0.12	1056	CPB1C331M0608□□
		8	8	4800	10	0.12	1056	CPB1C331M0808□□
	470	6.3	11	5000	10	0.12	1504	CPB1C471M0611□□
		8	8	4600	12	0.12	1504	CPB1C471M0808□□
		8	12	5200	10	0.12	1504	CPB1C471M0812□□
	560	8	12	5200	10	0.12	1792	CPB1C561M0812□□
	680	8	12	5200	10	0.12	2176	CPB1C681M0812□□
	820	8	12	6500	11	0.12	2624	CPB1C821M0812□□
		8	16	7000	8	0.12	2624	CPB1C821M0816□□
	1000	6.3	14	5400	11	0.12	3200	CPB1C102M0614□□
		8	12	6500	10	0.12	3200	CPB1C102M0812□□
		10	12	6100	10	0.12	3200	CPB1C102M1012□□
	1500	10	12	6100	10	0.12	4800	CPB1C152M1012□□

① Rated ripple current (100kHz / +105℃) ② ESR (100kHz / +20℃) ③ tan δ (120Hz / +20℃)

※Please refer to the page of reflow conditions for reflow profile.

Characteristics list

Rated voltage (V)	Capacitance (±20%) (μF)	Case size		Specification				Part Number④
		øD (mm)	L (mm)	Rated ripple current① (mA rms)	ESR② (mΩ)	tan δ③	L.C. (μA)	
25	100	6.3	6	1300	49	0.12	500	CPB1E101M0606□□
	220	6.3	8	2200	38	0.12	1100	CPB1E221M0608□□
		6.3	11	2500	34	0.12	1100	CPB1E221M0611□□
	330	8	12	3600	23	0.12	1650	CPB1E331M0812□□
	470	8	12	3800	22	0.12	2350	CPB1E471M0812□□
	680	6.3	14	3200	28	0.12	3400	CPB1E681M0614□□
		8	12	3800	25	0.12	3400	CPB1E681M0812□□
		10	12	4200	21	0.12	3400	CPB1E681M1012□□
	1000	8	16	5800	10	0.12	5000	CPB1E102M0816□□
		10	12	5000	14	0.12	5000	CPB1E102M1012□□
	1500	10	16	5800	10	0.12	7500	CPB1E152M1016□□
35	47	6.3	6	1300	50	0.12	329	CPB1V470M0606□□
	100	6.3	8	2000	40	0.12	700	CPB1V101M0608□□
	120	6.3	11	2500	34	0.12	840	CPB1V121M0611□□
	150	8	8	3000	25	0.12	1050	CPB1V151M0808□□
	220	8	12	3600	24	0.12	1540	CPB1V221M0812□□
	270	6.3	14	3100	24	0.12	1890	CPB1V271M0614□□
	330	10	12	4100	22	0.12	2310	CPB1V331M1012□□
	470	10	12	4800	14	0.12	3290	CPB1V471M1012□□
	680	10	16	5500	12	0.12	4760	CPB1V681M1016□□
50	22	6.3	6	1200	55	0.12	220	CPB1H220M0606□□
	33	6.3	8	1800	45	0.12	330	CPB1H330M0608□□
	47	6.3	11	2100	40	0.12	470	CPB1H470M0611□□
	68	8	12	3300	29	0.12	680	CPB1H680M0812□□
	100	8	12	3600	27	0.12	1000	CPB1H101M0812□□
	120	10	12	3400	29	0.12	1200	CPB1H121M1012□□
	150	10	12	3600	27	0.12	1500	CPB1H151M1012□□
	220	10	12	4000	23	0.12	2200	CPB1H221M1012□□
	330	10	16	4700	18	0.12	3300	CPB1H331M1016□□

① Rated ripple current (100kHz / +105°C) ② ESR (100kHz / +20°C) ③ tan δ (120Hz / +20°C)

※Please refer to the page of reflow conditions for reflow profile.

Part Number System:

Polymer E-cap	CPB series	16V	220μF	±20 %	6.3 φ x8L		
C	PB	1C	221	M	0608	□□	
Category	Series name	Rated voltage	Capacitance	Tolerance	Case Size	Package	Supplement

④ Note: For more details, please refer to "Part Number System - Conductive Polymer Solid Capacitors"