

CPR Series

Features

- $\phi 8 \sim \phi 10$, 125°C, 2000 hours assured
- Ultra low ESR and high ripple current
- Solid Electrolytic Capacitors of Radial type
- RoHS compliant, REACH & SVHC compliant



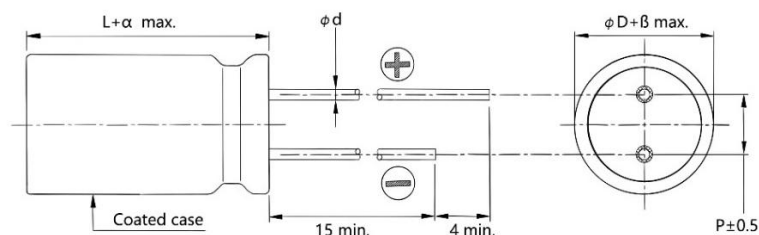
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Specifications					
Category temp. range	-55°C to +125°C				
Capacitance tolerance	±20% (120 Hz / +20 °C)				
Leakage current	Rated voltage applied, after 2 minutes at 20°C. Please see the attached characteristics list				
Tan δ	Please see the attached 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 125°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

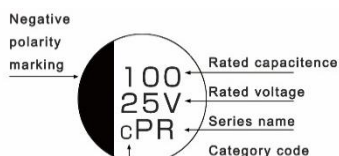
* For any doubt about measured values, measure the leakage current again after the following voltage treatment.

Voltage treatment: DC rated voltage is applied to the capacitors for 2 hours at 125 °C.

Dimensions:



Marking:



Dimensions					Unit: mm
ϕD	L	P	ϕd	α	β
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
8	20	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
10	20	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)	
				Endurance1 (+105°C)	Endurance2 (+125°C)				
16	470	8	8	4300	1720	15	0.10	1504	CPR1C471M0808□□
	820	8	12	4650	1860	13	0.10	2624	CPR1C821M0812□□
	1000	10	12	5600	2240	12	0.10	3200	CPR1C102M1012□□
	1200	8	16	7000	2500	13	0.10	3840	CPR1C122M0816□□
	1500	8	20	7500	2800	13	0.10	4800	CPR1C152M0820□□
	2200	10	16	8000	3200	13	0.10	7040	CPR1C222M1016□□
	2500	10	20	10000	4000	13	0.10	8000	CPR1C252M1020□□
25	100	8	8	2900	1160	24	0.10	500	CPR1E101M0808□□
	150	8	8	2900	1160	24	0.10	750	CPR1E151M0808□□
	220	8	12	4250	1700	18	0.10	1100	CPR1E221M0812□□
	330	8	12	4250	1700	18	0.10	1650	CPR1E331M0812□□
	470	8	12	4250	1700	18	0.10	2350	CPR1E471M0812□□
	470	10	12	4700	1880	16	0.10	2350	CPR1E471M1012□□
	560	10	12	4700	1880	16	0.10	2800	CPR1E561M1012□□
	680	10	12	4700	1880	16	0.10	3400	CPR1E681M1012□□
	1000	10	16	5000	2000	14	0.10	5000	CPR1E102M1016□□
	1800	10	20	5400	2160	14	0.10	9000	CPR1E182M1020□□
35	47	8	8	2600	1040	30	0.10	329	CPR1V470M0808□□
	68	8	8	2600	1040	30	0.10	476	CPR1V680M0808□□
	100	8	12	2950	1180	26	0.10	700	CPR1V101M0812□□
	150	8	12	2950	1180	26	0.10	1050	CPR1V151M0812□□
	180	8	12	2950	1180	26	0.10	1260	CPR1V181M0812□□
	220	8	12	2950	1180	26	0.10	1540	CPR1V221M0812□□
	220	10	12	3400	1360	24	0.10	1540	CPR1V221M1012□□
	330	10	12	3400	1360	24	0.10	2310	CPR1V331M1012□□
	680	10	16	3800	1520	22	0.10	4760	CPR1V681M1016□□
	1000	10	20	4580	1830	20	0.10	7000	CPR1V102M1020□□
50	47	8	12	2250	900	32	0.10	470	CPR1H470M0812□□
	68	8	12	2250	900	32	0.10	680	CPR1H680M0812□□
	82	8	12	2250	900	32	0.10	820	CPR1H820M0812□□
	120	8	12	2250	900	32	0.10	1200	CPR1H121M0812□□
	120	10	12	2620	1040	28	0.10	1200	CPR1H121M1012□□
	180	10	12	2620	1040	28	0.10	1800	CPR1H181M1012□□
	220	10	12	2620	1040	28	0.10	2200	CPR1H221M1012□□
	330	10	16	3400	1350	24	0.10	3300	CPR1H331M1016□□
	470	10	20	4250	1700	22	0.10	4700	CPR1H471M1020□□
63	82	8	12	2100	840	32	0.10	1033	CPR1J820M0812□□
	100	8	12	2100	840	32	0.10	1260	CPR1J101M0812□□
	150	10	12	2550	1020	28	0.10	1890	CPR1J151M1012□□
	180	10	12	2550	1020	28	0.10	2268	CPR1J181M1012□□
	220	10	16	3100	1250	26	0.10	2772	CPR1J221M1016□□
	330	10	20	3570	1420	24	0.10	4158	CPR1J331M1020□□

① Rated ripple current (100kHz / +125°C or +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	CPR series	25V	100μF	±20 %	8 φ x8L		
C	PR	1E	101	M	0808	□□	
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"