

CPV Series

Features

- $\phi 6.3 \sim \phi 10$, 105°C, 5000 hours assured
- Ultra low ESR and high ripple current
- Solid Electrolytic Capacitors of Radial type
- RoHS compliant, REACH & SVHC compliant



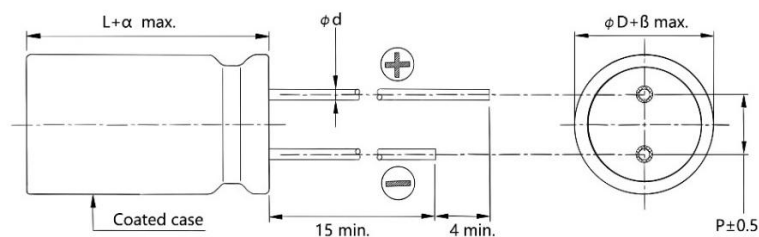
Marking color: Black

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	5000H			
	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.

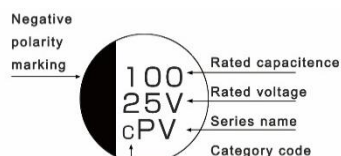
Voltage treatment: DC rated voltage is applied to the capacitors for 2 hours at 105 °C.

Dimensions:



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
8	8	3.5	0.6	1.5	0.5
8	12	3.5	0.6	1.5	0.5
10	12	5.0	0.6	1.5	0.5

Marking:



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	2740	17	0.12	280	CPV0E561M0606□□
	680	6.3	8	4100	10	0.12	340	CPV0E681M0608□□
	820	6.3	11	4300	9	0.12	410	CPV0E821M0611□□
	1000	8	8	6100	7	0.12	500	CPV0E102M0808□□
	1200	8	12	5830	8	0.12	600	CPV0E122M0812□□
	1500	8	12	5720	8	0.12	750	CPV0E152M0812□□
	2700	10	12	5420	9	0.12	1350	CPV0E272M1012□□
	3900	10	12	6260	8	0.12	1950	CPV0E392M1012□□
4	390	6.3	6	2980	18	0.12	312	CPV0G391M0606□□
	470	6.3	8	3740	12	0.12	376	CPV0G471M0608□□
	560	6.3	11	4100	10	0.12	448	CPV0G561M0611□□
	680	8	8	6100	7	0.12	544	CPV0G681M0808□□
	820	8	12	5000	9	0.12	656	CPV0G821M0812□□
	1200	8	12	5700	8	0.12	960	CPV0G122M0812□□
	2200	10	12	5700	8	0.12	1760	CPV0G222M1012□□
	3300	10	12	5960	9	0.12	2640	CPV0G332M1012□□
6.3	220	6.3	6	2980	18	0.12	277	CPV0J221M0606□□
	330	6.3	6	2860	19	0.12	416	CPV0J331M0606□□
	470	6.3	8	3910	11	0.12	592	CPV0J471M0608□□
	680	6.3	8	3650	15	0.12	857	CPV0J681M0608□□
		6.3	11	4300	10	0.12	857	CPV0J681M0611□□
	820	8	8	5220	10	0.12	1033	CPV0J821M0808□□
	1000	8	8	5700	7	0.12	1260	CPV0J102M0808□□
		8	12	5750	8	0.12	1260	CPV0J102M0812□□
	1500	8	12	6100	9	0.12	1890	CPV0J152M0812□□
		10	12	5600	9	0.12	1890	CPV0J152M1012□□
	2200	10	12	5500	9	0.12	2772	CPV0J222M1012□□
10	220	6.3	6	2920	17	0.12	440	CPV1A221M0606□□
	270	6.3	8	3400	15	0.12	540	CPV1A271M0608□□
	330	6.3	11	4300	10	0.12	660	CPV1A331M0611□□
		8	8	4500	8	0.12	660	CPV1A331M0808□□
	470	8	8	4300	10	0.12	940	CPV1A471M0808□□
	560	8	8	4400	14	0.12	1120	CPV1A561M0808□□
	680	8	12	5700	20	0.12	1350	CPV1A681M0812□□
	820	8	12	4510	11	0.12	1640	CPV1A821M0812□□
	1200	10	12	5200	11	0.12	2400	CPV1A122M1012□□
16	100	6.3	6	2490	24	0.12	320	CPV1C101M0606□□
	150	6.3	6	2630	25	0.12	480	CPV1C151M0606□□
	220	6.3	8	3100	19	0.12	704	CPV1C221M0608□□
	270	6.3	8	4300	13	0.12	864	CPV1C271M0608□□
	330	6.3	11	4800	9	0.12	1056	CPV1C331M0611□□
		8	8	4520	11	0.12	1056	CPV1C331M0808□□
	470	8	8	4300	13	0.12	1504	CPV1C471M0808□□
		8	12	4250	15	0.12	1504	CPV1C471M0812□□
	680	8	12	5400	11	0.12	2176	CPV1C681M0812□□
	820	8	12	4450	13	0.12	2624	CPV1C821M0812□□
		10	12	4200	16	0.12	2624	CPV1C821M1012□□
	1000	10	12	4800	14	0.12	3200	CPV1C102M1012□□
	1200	10	12	6100	11	0.12	3840	CPV1C122M1012□□

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.

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	47	6.3	6	2100	40	0.12	235	CPV1E470M0606□□
	68	6.3	6	2800	30	0.12	340	CPV1E680M0606□□
	100	6.3	8	3200	28	0.12	500	CPV1E101M0608□□
	120	6.3	11	3500	25	0.12	600	CPV1E121M0611□□
		8	8	2500	30	0.12	600	CPV1E121M0808□□
	150	8	12	4100	21	0.12	750	CPV1E151M0812□□
	220	8	12	4650	16	0.12	1100	CPV1E221M0812□□
	330	8	12	4650	17	0.12	1650	CPV1E331M0812□□
		10	12	4800	15	0.12	1650	CPV1E331M1012□□
	470	10	12	5000	14	0.12	2350	CPV1E471M1012□□
35	680	10	12	5000	14	0.12	3400	CPV1E681M1012□□
	47	6.3	6	2600	35	0.12	329	CPV1V470M0606□□
	68	6.3	8	2400	34	0.12	476	CPV1V680M0608□□
	100	6.3	11	2800	30	0.12	700	CPV1V101M0611□□
		8	8	3000	25	0.12	700	CPV1V101M0808□□
	150	8	12	4200	19	0.12	1050	CPV1V151M0812□□
	220	10	12	4500	21	0.12	1540	CPV1V221M1012□□
	330	10	12	4800	18	0.12	2310	CPV1V331M1012□□
50	15	6.3	6	2100	40	0.12	150	CPV1H150M0606□□
	22	6.3	8	2300	32	0.12	220	CPV1H220M0608□□
	47	8	8	2800	25	0.12	470	CPV1H470M0808□□
	68	8	12	3600	23	0.12	680	CPV1H680M0812□□
	82	10	12	3800	23	0.12	820	CPV1H820M1012□□
	100	10	12	4100	20	0.12	1000	CPV1H101M1012□□

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	CPV series	16V	220μF	±20 %	6.3 φ x8L		
C	PV	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"