CMR Series

Features

- φ6.3 ~ φ10, 125℃, 2000 hours assured
- Ultra low ESR and high ripple current
- Solid Electrolytic Capacitors of SMD type
- RoHS compliant, REACH & SVHC compliant

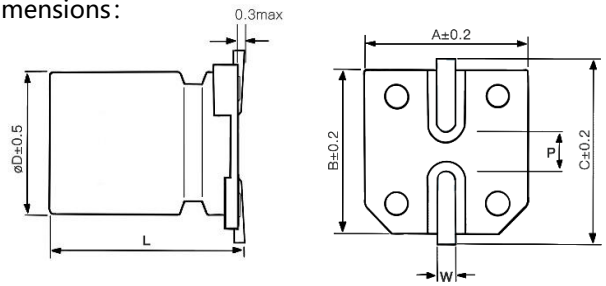
Marking color: Black

Specifications					
Category temp. range	–55℃ to +125℃				
Capacitance tolerance	±20% (120 Hz / +20 ℃)				
Leakage current	Rated voltage applied, after 2 minutes at 20℃. 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 ℃) / Z (+20 ℃) ≤ 1.15	Max. Impedance ratio at 100 kHz			
	Z (-55 ℃) / Z (+20 ℃) ≤ 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℃ after the rated voltage applied for 2,000hours at 125℃.				
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℃ after subjecting them at 60℃, 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 ℃, 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.

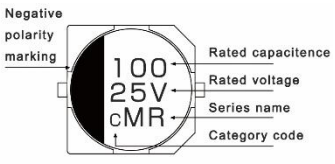
Voltage treatment: DC rated voltage is applied to the capacitors for 2 hours at 125 ℃.

Dimensions:



Dimensions						Unit: mm
φD	L	A	B	C	W	P±0.2
6.3	6±0.5	6.6	6.6	7.3	0.5~0.8	2.0
6.3	7.7±0.5	6.6	6.6	7.3	0.5~0.8	2.0
8	10±0.5	8.3	8.3	9.1	0.7~1.3	3.1
8	12.5±0.5	8.3	8.3	9.1	0.7~1.3	3.1
10	10.5±0.5	10.3	10.3	11.1	0.7~1.3	4.4
10	12.5±0.5	10.3	10.3	11.1	0.7~1.3	4.4

Marking:



Characteristics list

Rated voltage (V)	Capacitance (±20%) (μF)	Case size		Specification					Part Number④	Taping&Reel
		øD (mm)	L (mm)	Rated ripple current① (mA rms)		ESR② (mΩ)	tan δ③	L.C. (μA)		MPQ (pcs/reel)
				Endurance1 (+105℃)	Endurance2 (+125℃)					
16	100	6.3	6	2500	780	24	0.10	320	CMR1C101M0606	1000
	220	6.3	7.7	2800	880	33	0.10	704	CMR1C221M0607	1000
	470	8	10	3520	1100	17	0.10	1504	CMR1C471M0810	500
	680	8	12.5	4000	1250	16	0.10	2176	CMR1C681M0813	400
		10	10.5	4350	1360	19	0.10	2176	CMR1C681M1010	500
	1000	10	12.5	4640	1450	12	0.10	3200	CMR1C102M1013	400
25	47	6.3	6	2140	670	43	0.10	235	CMR1E470M0606	1000
	100	6.3	7.7	2400	760	35	0.10	500	CMR1E101M0607	1000
	220	8	10	3200	1000	30	0.10	1100	CMR1E221M0810	500
	330	8	12.5	3680	1150	22	0.10	1650	CMR1E331M0813	400
	470	10	10.5	4000	1250	20	0.10	2350	CMR1E471M1010	500
	680	10	12.5	4320	1350	18	0.10	3400	CMR1E681M1013	400
35	39	6.3	6	1920	600	48	0.10	273	CMR1V390M0606	1000
	68	6.3	7.7	2140	670	45	0.10	476	CMR1V680M0607	1000
	120	8	10	2880	900	35	0.10	840	CMR1V121M0810	500
	180	8	12.5	3200	1000	33	0.10	1260	CMR1V181M0813	400
	220	10	10.5	3680	1150	25	0.10	1540	CMR1V221M1010	500
	330	10	12.5	3840	1200	29	0.10	2310	CMR1V331M1013	400
50	22	6.3	6	1630	510	80	0.10	220	CMR1H220M0606	1000
	33	6.3	7.7	1850	580	65	0.10	330	CMR1H330M0607	1000
	47	8	10	2400	750	37	0.10	470	CMR1H470M0810	500
	68	8	12.5	2250	850	35	0.10	680	CMR1H680M0813	400
	100	10	10.5	2880	900	31	0.10	1000	CMR1H101M1010	500
	180	10	12.5	3320	1040	25	0.10	1800	CMR1H181M1013	400

① Rated ripple current (100kHz / +125℃ or +105℃)　② ESR (100kHz / +20℃)　③ tan δ (120Hz / +20℃)

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

Part Number System:

Polymer E-cap	CMR series	25V	100μF	±20 %	6.3 φ x7.7L	
C	**MR**	**1E**	**101**	**M**	**0607**	
Category	Series name	Rated voltage	Capacitance	Tolerance	Case Size	Supplement

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