

CMB Series

Features

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



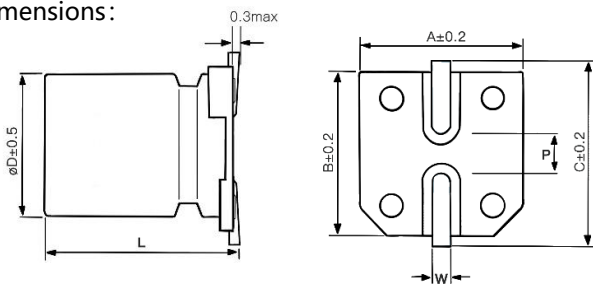
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Specifications					
Category temp. range	-55°C to +105°C				
Capacitance tolerance	±20% (120 Hz / +20 °C)				
Leakage current	Rated voltage applied, after 2 minutes at 20°C. Please see the attached characteristics list				
Tan δ	Please see the attached 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.

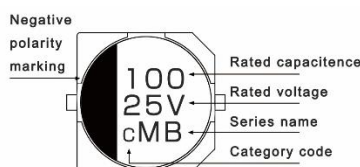
Voltage treatment: DC rated voltage is applied to the capacitors for 2 hours at 105 °C.

Dimensions:



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 ($\pm 20\%$) (μF)	Case size		Specification				Part Number ^④	Taping&Reel
		$\varnothing\text{D}$ (mm)	L (mm)	Rated ripple current ^① (mA rms)	ESR ^② ($\text{m}\Omega$)	$\tan \delta$ ^③	L.C. (μA)		MPQ (pcs/reel)
2.5	560	6.3	6	2900	20	0.12	280	CMB0E561M0606	1000
	680	6.3	7.7	3600	13	0.12	340	CMB0E681M0607	1000
	1200	8	10	5220	10	0.12	600	CMB0E122M0810	500
	1500	8	12.5	5400	9	0.12	750	CMB0E152M0813	400
	2700	10	10.5	4700	12	0.12	1350	CMB0E272M1010	500
	3900	10	12.5	5600	10	0.12	1950	CMB0E392M1013	400
4	390	6.3	6	2700	22	0.12	312	CMB0G391M0606	1000
	470	6.3	7.7	3470	14	0.12	376	CMB0G471M0607	1000
	1000	8	10	5220	10	0.12	800	CMB0G102M0810	500
	1200	8	12.5	4700	12	0.12	960	CMB0G122M0813	400
	2200	10	10.5	4600	13	0.12	1760	CMB0G222M1010	500
	3300	10	12.5	5400	11	0.12	2640	CMB0G332M1013	400
6.3	330	6.3	6	2600	23	0.12	415	CMB0J331M0606	1000
	470	6.3	7.7	3470	14	0.12	592	CMB0J471M0607	1000
	820	8	10	4770	12	0.12	1033	CMB0J821M0810	500
	1000	8	12.5	5150	10	0.12	1260	CMB0J102M0813	400
	1500	10	10.5	5025	12	0.12	1890	CMB0J152M1010	500
	2200	10	12.5	5000	12	0.12	2772	CMB0J222M1013	400
10	220	6.3	6	2700	20	0.12	440	CMB1A221M0606	1000
	270	6.3	7.7	3100	19	0.12	540	CMB1A271M0607	1000
	390	8	10	4000	17	0.12	780	CMB1A391M0810	500
	470	8	12.5	4000	14	0.12	940	CMB1A471M0813	400
	1000	10	10.5	4300	15	0.12	2000	CMB1A102M1010	500
	1200	10	12.5	4800	13	0.12	2400	CMB1A122M1013	400
16	150	6.3	6	2400	30	0.12	480	CMB1C151M0606	1000
	220	6.3	7.7	2700	24	0.12	704	CMB1C221M0607	1000
	470	8	10	3890	18	0.12	1504	CMB1C471M0810	500
	820	8	12.5	4070	16	0.12	2624	CMB1C821M0813	400
		10	10.5	3700	20	0.12	2624	CMB1C821M1010	500
	1000	10	12.5	4200	18	0.12	3200	CMB1C102M1013	400

① Rated ripple current (100kHz / +105°C) ② ESR (100kHz / +20°C) ③ $\tan \delta$ (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	Taping&Reel
		øD (mm)	L (mm)	Rated ripple current① (mA rms)	ESR② (mΩ)	tan δ③	L.C. (μA)		MPQ (pcs/reel)
25	68	6.3	6	1300	49	0.12	340	CMB1E680M0606	1000
	100	6.3	7.7	2200	38	0.12	500	CMB1E101M0607	1000
	150	8	10	3600	23	0.12	750	CMB1E151M0810	500
	220	8	12.5	3800	22	0.12	1100	CMB1E221M0813	400
	330	10	10.5	3700	23	0.12	1650	CMB1E331M1010	500
	470	10	12.5	4200	21	0.12	2350	CMB1E471M1013	400
35	47	6.3	6	1300	50	0.12	329	CMB1V470M0606	1000
	68	6.3	7.7	2000	40	0.12	476	CMB1V680M0607	1000
	120	8	10	3600	24	0.12	840	CMB1V121M0810	500
	150	8	12.5	3800	23	0.12	1050	CMB1V151M0813	400
	220	10	10.5	3700	24	0.12	1540	CMB1V221M1010	500
	330	10	12.5	4100	22	0.12	2310	CMB1V331M1013	400
50	22	6.3	6	1200	55	0.12	220	CMB1H220M0606	1000
	33	6.3	7.7	1800	45	0.12	330	CMB1H330M0607	1000
	68	8	10	3300	29	0.12	680	CMB1H680M0810	500
	100	8	12.5	3600	27	0.12	1000	CMB1H101M0813	400
	100	10	10.5	3400	29	0.12	1000	CMB1H101M1010	500
	220	10	12.5	3600	27	0.12	2200	CMB1H221M1013	400

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	CMB series	25V	100μF	±20 %	6.3 φ x7.7L	
C	MB	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"