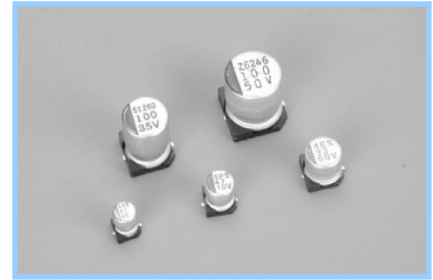


CM SERIES

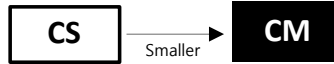
85°C, Standard, Chip type

■ Features

- 85°C, Standard, SMD type
- Expand up to Φ10 case sizes
- Load life of 2,000 hours at 85°C

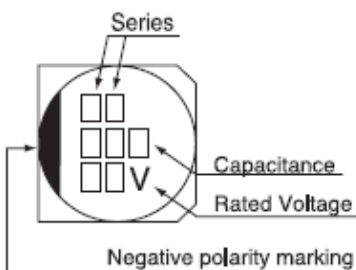


■ Specifications

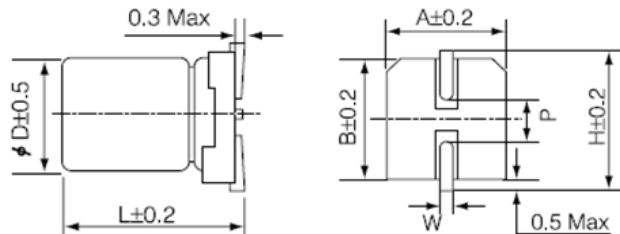


Item	Performance Characteristics						
Operating temperature range	-40°C ~ +85°C						
Rated working voltage range	6.3V ~ 50V						
Nominal capacitance range	4.7 μF ~ 1,000 μF , ±20% (at 20°C, 120Hz)						
D.C Leakage current(at 20°C)	I ≤ 0.01CV or 3μA (2min), whichever is greater.						
		Where I = Leakage current(μA)			C = Nominal capacitance(μF)		V = Rated voltage (V)
Tan δ (max., at 20°C, 120Hz)	W.V	6.3	10	16	25	35	50
	Tan δ	0.35	0.26	0.20	0.15	0.15	0.15
Characteristics at low temperature(max.) (impedance ratio at 120Hz)	W.V(V)	6.3	10	16	25	35	50
	Z-25°C/Z+20°C	4	3	2	2	2	2
	Z-40°C/Z+20°C	8	6	4	4	3	3
Load life	After applying rated working voltage for 2,000 hours at +85°C and then listed being stabilized at +20°C, capacitors shall meet following limits.						
	Capacitance change	Within ±25% of the initial measured value					
	Tan δ	≤ 300% of the initial specified value					
	Leakage current	≤ The initial specified value					
Shelf life	After storage for 1,000hours at + 105°C with no voltage applied and then being stabilized at +20°C, capacitors shall meet following limits.						
	Capacitance change	Within ±25% of the initial measured value					
	Tan δ	≤ 300% of the initial specified value					
	Leakage current	≤ The initial specified value					
Resistance to soldering heat	After reflow soldering(Refer to reflow soldering temperature profile) and then being stabilized at +20°C, capacitors shall meet following limits.						

■ Marking



■ Dimensions in mm(not to scale)



Size code	Φ D	L	A	B	P	H	W
B	4	5.3	4.3	4.3	1	5	0.5~0.8
C	5	5.3	5.3	5.3	1.5	5.9	0.5~0.8
D	6.3	5.3	6.6	6.6	2	7.2	0.5~0.8
D ₁	6.3	5.7	6.6	6.6	2	7.2	0.5~0.8
D ₂	6.3	7.7	6.6	6.6	2	7.2	0.5~0.8
E	8	6.3	8.3	8.3	2.3	9	0.5~0.8
F	8	10	8.3	8.3	3.1	9	0.8~1.1
G	10	10	10.3	10.3	4.5	11	0.8~1.1

CM SERIES

▣ Dimensions & Maximum permissible ripple current

μF \ V	6.3	10	16	25	35	50
4.7						B 20
10				B 24	B 26	C 30
22			B 28	C 30	D 60	D 50
33	B 30	B 35	C 35	C 40	D 70	D ₁ , E 65
47	C 46	C 43	C 39	D 65	D ₂ , E 110	D ₂ , F 155
100	D 71	D 70	D ₁ , E 70	E 155	D ₂ , E 180	G 200
220	D ₁ , E 86	D ₂ , E 250	D ₂ , E 260	G 280	G 280	
330	D ₂ , E 190	F 330	F 310	G 350		
470	F 252	G 400	G, F 460			
1,000	G 470	Size Code Maximum permissible ripple current[mA(rms) at 85°C, 120Hz]				