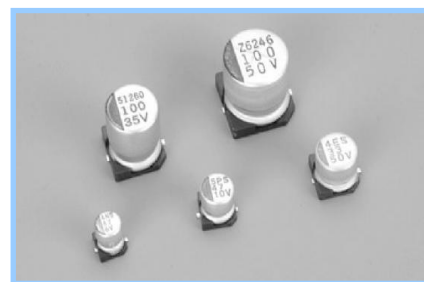


CW SERIES

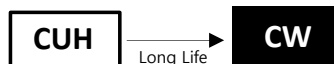
105°C, Long Life, Chip type

■ Features

- 105°C, Long Life, SMD type
- Expand up to Φ10 case sizes
- Load life of 5,000 hours at 105°C

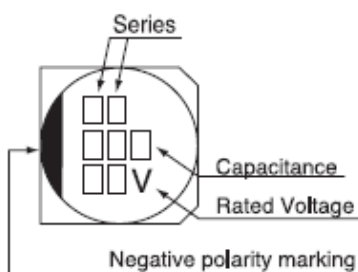


■ Specifications

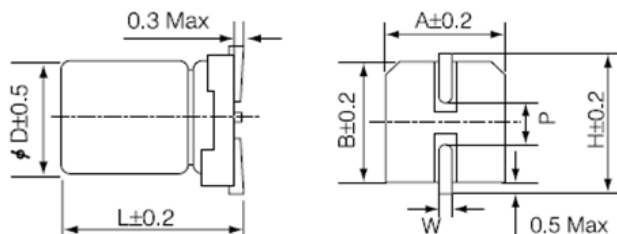


Item	Performance Characteristics						
Operating temperature range	-40°C ~ +105°C						
Rated working voltage range	6.3V ~ 50V						
Nominal capacitance range	0.1 μF ~ 680 μF , ±20% (at 20°C, 120Hz)						
D.C Leakage current(at 20°C)	I ≤ 0.01CV or 3μA (2min), whichever is greater.						
	Where I = Leakage 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	0.28	0.24	0.20	0.16	0.14	0.12
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 5,000 hours at +105°C and then listed being stabilized at +20°C, capacitors shall meet following limits.						
	Capacitance change	Within ±30% 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 ±30% 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

CW SERIES

▣ Dimensions & Maximum permissible ripple current

μF \ V	6.3	10	16	25	35	50
0.1						B 1.2
0.22						B 2.6
0.33						B 3.2
0.47						B 3.8
1.0						B 6.0
2.2						B 11
3.3						B 14
4.7				B 13	B 15	C 19
10			B 17	C 25	C 25	D 30
22		C 30	C 30	D 42	D 40	D ₂ 46
33	C 35	C 35	D 47	D 47	D ₂ 57	F 77
47	C 36	D 49	D 50	D ₂ 62	F 92	F 92
100	D ₁ 58	D ₂ 85	D ₂ 98	F 116	G 151	G 151
220	D ₂ 98	F 135	F 145	G 216	G 216	
330	F 158	G 238	G 238	G 238		
470	G 254	G 254	G 254			
680	G 315	Size Code Maximum permissible ripple current[mA(rms) at 105°C, 120Hz]				