SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

SAMWHA

Upgrade

CD

Chip type, Extremely Low Impedance Series

Low Impedance   Solvent Proof

· Chip type, low impedance temperature range up to 105°C
· Designed for surface mounting on high density PC board
· Applicable to automatic insertion machine using carrier tape
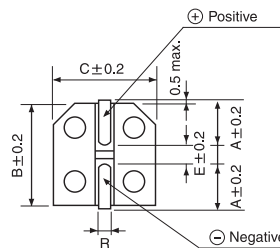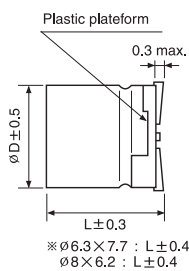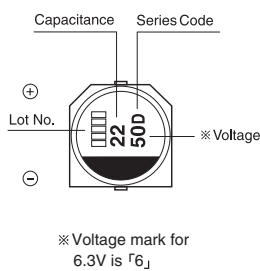· Complied to the RoHS directive

CK ⟹ **CD**
Low Imp.

Item	Characteristics
Operating temperature range	-55 ~ +105°C
Leakage current max.	I = 0.01CV or 3μA whichever is greater (after 2 minutes)
Capacitance tolerance	±20% at 120Hz, 20°C

Dissipation factor max. (at 120Hz, 20°C)

WV	6.3	10	16	25	35	50	63	80	100
tanδ	0.24	0.19	0.16	0.14	0.12	0.12	0.10	0.10	0.10

Low temperature characteristics (Impedance ratio at 120Hz)

WV	6.3	10	16	25	35	50	63 ~ 100
Z-25°C/Z+20°C	2	2	2	2	2	2	3
Z-55°C/Z+20°C	3	3	3	3	3	3	4

Load life (after application of the rated voltage for 2000 hours at 105°C)

Leakage current	Less than specified value
Capacitance change	Within ±25% of initial value
tanδ	Less than 200% of specified value

Shelf life (at 105°C)

After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4

Resistance to soldering heat

The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 250°C for 10 seconds.

Leakage current	Less than specified value
Capacitance change	Within ±10% of initial value
tanδ	Less than specified value

● DRAWING

Unit : mm

-Series code of CD is "D"

(∅6.3×5.8, 7.7, ∅8×6.2)

Capacitance Series Code
⊕
Lot No.   22 50D   ※Voltage
⊖

※Voltage mark for 6.3V is 「6」

Plastic plateform
0.3 max.
∅D±0.5
L±0.3
※∅6.3×7.7 : L±0.4
∅8×6.2 : L±0.4

⊕ Positive
0.5 max.
C±0.2
B±0.2
E±0.2 A±0.2
A±0.2
R
⊖ Negative

∅D	A	B	C	E	R
6.3×5.8	2.4	6.6	6.6	2.2	0.5~0.8
6.3×7.7	2.4	6.6	6.6	2.2	0.5~0.8
8×6.2	3.3	8.3	8.3	2.3	0.5~0.8
8×10	2.9	8.3	8.3	3.1	0.8~1.1
10×10	3.2	10.3	10.3	4.5	0.8~1.1
12.5×13.5	4.6	12.8	12.8	4.5	1.1~1.4

(∅8×10, ∅10×10)

Capacitance Series Code
⊕
Lot No.   100 50D   ※Voltage
⊖

Plastic plateform
0.3 max.
∅D±0.5
L±0.5
Safety vent

⊕ Positive
0.5 max.
C±0.2
B±0.2
E±0.2 A±0.2
A±0.2
R
⊖ Negative
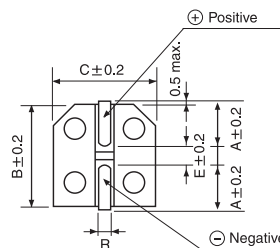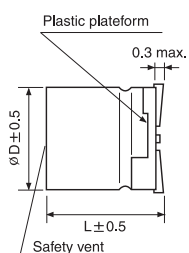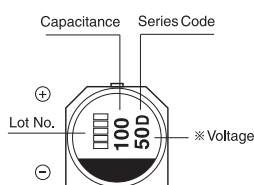
CD series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \ WV	6.3			10			16			25			35			50		
10																6.3×5.8	0.92	170
15																6.3×5.8	0.79	170
22																6.3×5.8	0.79	170
33							6.3×5.8	0.39	384	6.3×5.8	0.39	384	6.3×5.8	0.43	384	6.3×7.7	0.61	280
																8×6.2	0.58	300
47				6.3×5.8	0.36	384	6.3×5.8	0.39	384	6.3×5.8	0.39	384	6.3×5.8	0.43	384	6.3×7.7	0.61	280
																8×6.2	0.58	300
68	6.3×5.8	0.40	384	6.3×5.8	0.36	384	6.3×5.8	0.36	384	6.3×5.8	0.36	384	6.3×7.7	0.29	600	8×10	0.29	350
100	6.3×5.8	0.40	384	6.3×5.8	0.36	384	6.3×5.8	0.36	384	6.3×7.7	0.29	600	8×10	0.15	960	10×10	0.18	700
										8×6.2	0.24	500						
150	6.3×5.8	0.40	384	6.3×5.8	0.36	384	6.3×7.7	0.29	600	8×10	0.15	960	8×10	0.15	960			
220	6.3×5.8	0.40	384	6.3×7.7	0.32	600	6.3×7.7	0.29	600	8×10	0.15	960	10×10	0.09	1360			
				8×6.2	0.24	500	8×6.2	0.24	500									
330	6.3×7.7	0.29	600	8×10	0.15	960	8×10	0.15	960	10×10	0.09	1360						
	8×6.2	0.24	500															
470	8×10	0.15	960	8×10	0.15	960	10×10	0.07	1360									
680	8×10	0.15	960	10×10	0.07	1360												
1000	10×10	0.07	1360															
1500	10×10	0.07	1360															

μF \ WV	63			80			100		
10	6.3×5.8	2.30	80	6.3×7.7	2.16	60			
22	6.3×7.7	1.90	120	8×10	1.17	130	8×10	1.80	130
33	8×10	0.80	250	8×10	1.17	130	10×10	1.35	200
47	8×10	0.80	250	10×10	1.08	200	12.5×13.5	0.90	500
68	10×10	0.70	400	12.5×13.5	0.70	500	12.5×13.5	0.90	500
100	10×10	0.70	400	12.5×13.5	0.70	500			
150	12.5×13.5	0.54	800	12.5×13.5	0.70	500			
220	12.5×13.5	0.54	800						

↑ Ripple current (mA rms) at 105℃, 100kHz
↑ Impedance (Ω) at 20℃, 100kHz
↑ Case size ∅D X L (mm)

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz≦
Coefficient	0.35	0.5	0.64	0.83	1.00