

SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

Chip type, Wide Temperature Range



- Wide operating temperature range of -55 – +105°C
- Designed for surface mounting on high density PC board
- Applicable to automatic insertion machine using carrier tape
- Complied to the RoHS directive

Item	Characteristics						
Operating temperature range	-55 – +105°C						
Leakage current max.	I = 0.01CV or 3 μ A 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
	tan δ	0.27	0.23	0.19	0.15	0.13	0.11
Low temperature characteristics (Impedance ratio at 120Hz)	WV	6.3	10	16	25	35	50
	Z-25°C/Z+20°C	3	3	2	2	2	2
	Z-55°C/Z+20°C	8	5	4	3	3	3
Load life (after application of the rated voltage for 1000 hours at 105°C)	Leakage current	Less than specified value					
	Capacitance change	Within ± 20% of initial value					
	tan δ	Less than 200% of specified value					
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tan δ 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					
	tan δ	Less than specified value					

● DRAWING (See page 55)

Unit : mm

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μ F \ WV	6.3	10	16	25	35	50
0.1						4×5.3 2
0.22						4×5.3 3
0.33						4×5.3 4
0.47						4×5.3 5
1.0						4×5.3 7
2.2						4×5.3 11
3.3						4×5.3 13
4.7				4×5.3 13	4×5.3 14	5×5.3 18
10			4×5.3 17	5×5.3 23	5×5.3 24	6.3×5.3 31
22	4×5.3	22 5×5.3	27 5×5.3	30 6.3×5.3	39 6.3×5.3	42 6.3×5.8
33	5×5.3	31 5×5.3	33 6.3×5.3	43 6.3×5.3	48 6.3×5.8	52 6.3×7.7
47	5×5.3	36 6.3×5.3	46 6.3×5.3	51 6.3×5.8	59 6.3×5.8	63 6.3×7.7
100	6.3×5.3	50 6.3×5.8	64 6.3×5.8	64 6.3×7.7	91 8×10	206 10×10
220	6.3×7.7	86 6.3×7.7	105 6.3×7.7	105 8×10	340 10×10	435
330	6.3×7.7	105 8×10	305 8×10	340 10×10	360	
470	8×10	330 10×10	340 10×10	470		
1000	10×10	475				

↑ ← Ripple current (mA rms) at 105°C, 120Hz
Case size (D×L) (mm)

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz \leq
Coefficient	0.70	1.00	1.17	1.36	1.50