

SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

RC Chip type, Wide Temperature Range Series



- 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 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
	tanδ	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-40°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 ±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 6035 clause 5.4.						
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 (See page 55)

Unit : mm

-Series code of RC is "F"

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \ 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 45
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 60
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 63
100	6.3×5.3 50	6.3×5.8 64	6.3×5.8 64	6.3×7.7 91	8×10 296	10×10 295
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 ØD×L (mm)

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

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