

# 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



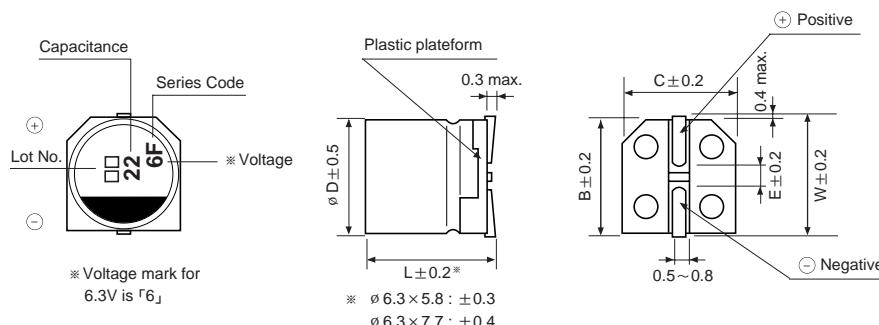
SC → RC  
Wide temp.



Item	Characteristics												
Operating temperature range	-55 ~ +105°C												
Leakage current max.	$I = 0.01CV$ or $3\mu A$ whichever is greater (after 2 minutes)												
Capacitance tolerance	$\pm 20\%$ at 120Hz, 20°C												
Dissipation factor max. (at 120Hz, 20°C)	WV	6.3	10	16	25	35	50						
	$\tan\delta$	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 $\pm 25\%$ of initial value											
	$\tan\delta$	Less than 200% of specified value											
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and $\tan\delta$ are same as load life value.												
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 30 seconds.												
	Leakage current	Less than specified value											
	Capacitance change	Within $\pm 10\%$ of initial value											
	$\tan\delta$	Less than specified value											

Unit : mm

### DRAWING



Ø D	W	B	C	E
4	4.8	4.3	4.3	1.0
5	6.0	5.3	5.3	1.4
6.3	7.1	6.6	6.6	2.2

\* Ø 8, 10 Drawing See Page 35

### DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

$\mu F \backslash WV$	6.3	10	16	25	35	50	
0.1							4 × 5.3 2.3
0.22							4 × 5.3 3.4
0.33							4 × 5.3 4.1
0.47							4 × 5.3 4.9
1.0							4 × 5.3 7.2
2.2							4 × 5.3 10.7
3.3							4 × 5.3 13.1
4.7				4 × 5.3 13	4 × 5.3 14	5 × 5.3 18.1	
10			4 × 5.3 17	5 × 5.3 23	5 × 5.3 24	6.3 × 5.3 30.8	
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 × 10 425	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 Ø D × L (mm)