

# SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

**CB** Chip type, Long Life Series

**LL** Long Life **S** Solvent Proof



- Chip type with load life 5000 hours at 105°C
- Chip type with 5.5mmL Height
- Designed for surface mounting on high density PC board
- Applicable to automatic insertion machine using carrier tape
- Complied to the RoHS directive

**RC** → **CB**  
Long life

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	4    6.3    10    16    25    35    50
	tanδ	0.24    0.22    0.19    0.16    0.14    0.12    0.11
Low temperature characteristics (Impedance ratio at 120Hz)	WV	4    6.3    10    16    25 ~ 50
	Z-25°C/Z+20°C	6    4    3    2    2
	Z-55°C/Z+20°C	12    10    7    5    3
Load life (after application of the rated voltage for 5000 hours at 105°C)	Capacitance change	Within ±30% of initial value
	tanδ	Less than 300% of the specified value
	Leakage current	Less than 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 (See page 55)

Unit : mm

-Series code of CB is "B"

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \ WV	4	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 14
4.7					4×5.3 14	4×5.3 15	5×5.3 19
6.8					4×5.3 17	5×5.3 21	6.3×5.3 26
10				4×5.3 19	5×5.3 24	5×5.3 26	6.3×5.3 33
15			4×5.3 22	5×5.3 28	5×5.3 31	6.3×5.3 37	6.3×5.3 40
22	4×5.3 24	4×5.3 25	5×5.3 30	5×5.3 33	6.3×5.3 42	6.3×5.3 45	
33	5×5.3 33	5×5.3 35	5×5.3 38	6.3×5.3 48			
47	5×5.3 40	5×5.3 42	6.3×5.3 52	6.3×5.3 57			
68	5×5.3 48	6.3×5.3 55	6.3×5.3 63				
100	5×5.3 55	6.3×5.3 67	6.3×5.3 72				

↑ 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