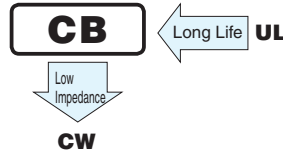


ALUMINUM ELECTROLYTIC CAPACITORS

CB series Chip Type, Long Life Assurance



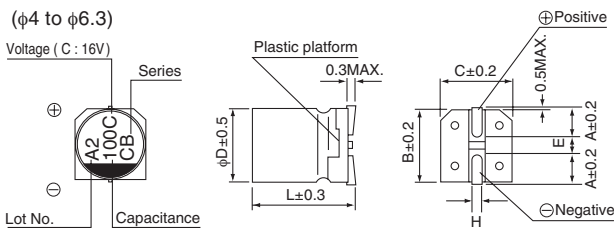
- Chip type with load life of 7000 hours at +105°C.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).



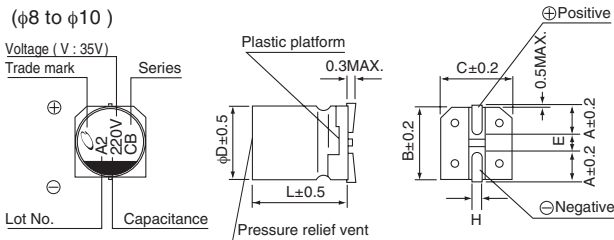
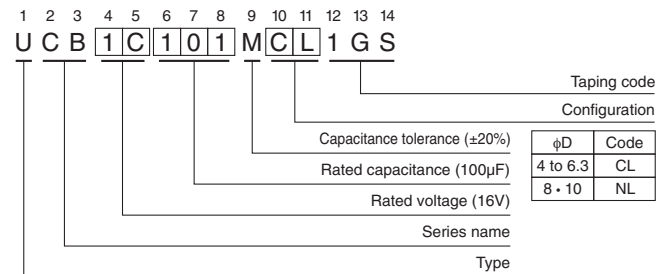
Specifications

Item	Performance Characteristics						
Category Temperature Range	-25 to +105°C						
Rated Voltage Range	6.3 to 50V						
Rated Capacitance Range	0.1 to 1000μF						
Capacitance Tolerance	±20% at 120Hz, 20°C						
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.03 CV or 4 (μA), whichever is greater.						
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C						
	Rated voltage (V)	6.3	10	16	25	35	50
Stability at Low Temperature	Measurement frequency : 120Hz						
	Rated voltage (V)	6.3	10	16	25	35	50
Endurance	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	4	3	2	2	2
	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 7000 hours at 105°C.		Capacitance change	Within ±30% of the initial capacitance value			
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.		tan δ	300% or less than the initial specified value			
	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.		Leakage current	Less than or equal to the initial specified value			
Resistance to soldering heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.		Capacitance change	Within ±10% of the initial capacitance value			
			tan δ	Less than or equal to the initial specified value			
Marking	Black print on the case top.		Leakage current	Less than or equal to the initial specified value			

Chip Type



Type numbering system (Example : 16V 100μF)



φD × L	4 × 7	5 × 7	6.3 × 7	6.3 × 8.7	8 × 10	10 × 10
A	1.8	2.1	2.4	2.4	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	10.3
E	1.0	1.3	2.2	2.2	3.1	4.5
L	7.0	7.0	7.0	8.7	10	10
H	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

Voltage

V	6.3	10	16	25	35	50
Code	j	A	C	E	V	H

●Dimension table in next page.



■ Dimensions

Cap.(μ F)	Code	V		6.3		10		16		25		35		50	
		OJ		1A		1C		1E		1V		1H			
0.1	0R1											4 × 7	1.0		
0.22	R22											4 × 7	2.6		
0.33	R33											4 × 7	3.2		
0.47	R47											4 × 7	3.8		
1	010											4 × 7	6.2		
2.2	2R2											4 × 7	11		
3.3	3R3											4 × 7	14		
4.7	4R7											4 × 7	15		
10	100							4 × 7	18			5 × 7	25		
22	220	4 × 7	22					5 × 7	30			6.3 × 7	42		
33	330			5 × 7	35					6.3 × 7	48	6.3 × 8.7	57	8 × 10	77
47	470	5 × 7	36					6.3 × 7	50	6.3 × 8.7	63			8 × 10	92
100	101	6.3 × 7	60					6.3 × 8.7	81	8 × 10	116			10 × 10	151
220	221	6.3 × 8.7	101	8 × 10	141							10 × 10	216		
330	331	8 × 10	160												
470	471							10 × 10	254						
1000	102	10 × 10	313											Case size ϕ D × L (mm)	Rated ripple

Rated ripple current (mArms) at 105°C 120Hz

● Frequency coefficient of rated ripple current

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

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please refer to page 3 for the minimum order quantity.