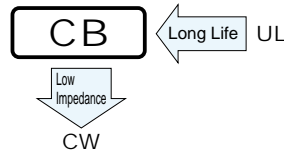


CB series Chip Type, Long Life Assurance



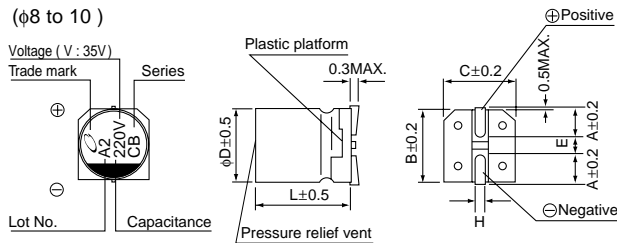
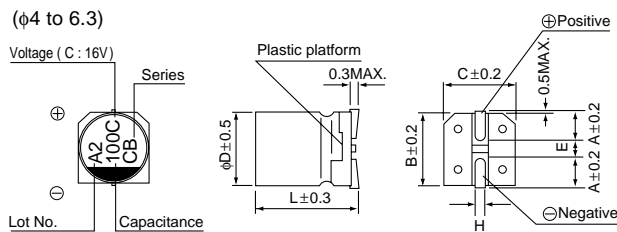
- Chip type with load life of 7000 hours at +105°C.
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2002/95/EC).



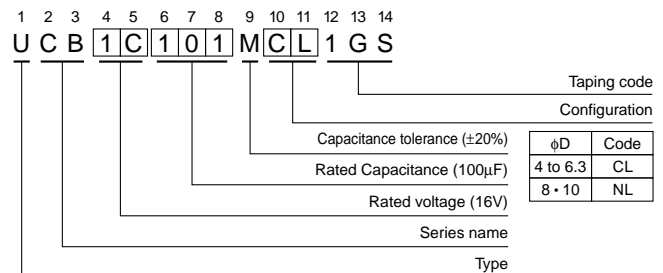
Specifications

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.						
tan δ	Measurement frequency : 120Hz, Temperature : 20°C						
	Rated voltage (V)	6.3	10	16	25	35	50
Stability at Low Temperature	Measurement frequency : 120Hz						
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	4	3	2	2	2
Endurance	After 7000 hours' application of rated voltage at 105°C, capacitors meet the characteristic requirements listed at right.		Capacitance change		Within ±30% of initial value		
			tan δ		300% or less of initial specified value		
			Leakage current		Initial specified value or less		
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.						
Resistance to soldering heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed at right.		Capacitance change		Within ±10% of initial value		
			tan δ		Initial specified value or less		
			Leakage current		Initial specified value or less		
Marking	Black print on the case top.						

Chip Type



Type numbering system (Example : 16V 100μF)



Voltage

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

(mm)

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

■Dimensions

Cap.(μ F)	Code	V		6.3		10		16		25		35		50	
		0J	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							Case size	Rated
1000	102	10×10	313											ϕ D×L (mm)	ripple

Rated Ripple (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.