

UCB

Chip Type, Long Life Assurance



For SMD



Long Life

Anti-Solvent
Feature

- 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, (EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

UCB

Long Life UUL



UCW

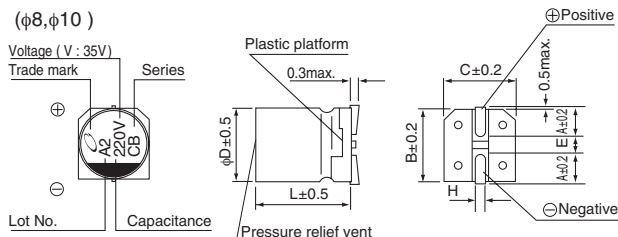
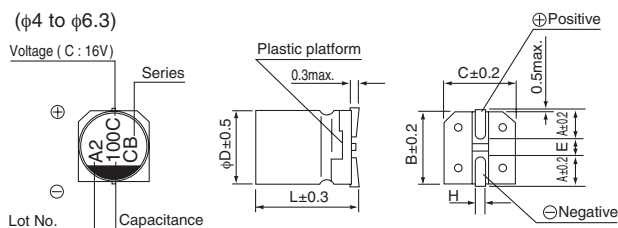


■ Specifications

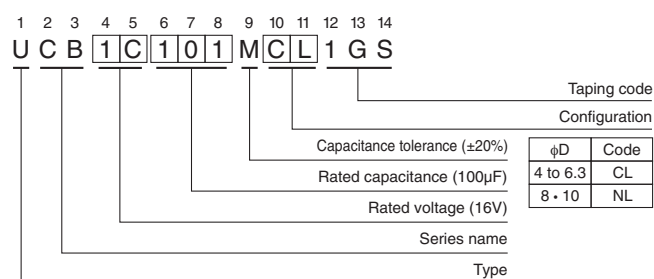
Item	Performance Characteristics														
Category Temperature Range	-25 to +105°C														
Rated Voltage Range	6.3 to 50V														
Rated Capacitance Range	1 to 1000μF														
Capacitance Tolerance	±20% at 120Hz, 20°C														
Leakage Current ※	After 2 minutes' application of rated voltage at 20°C, 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								
	tan δ (max.)	0.32	0.28	0.26	0.16	0.14	0.14								
Stability at Low Temperature	Measurement frequency : 120Hz														
	Rated voltage (V)		6.3	10	16	25	35	50							
	Impedance ratio ZT / Z20 (max.)	Z(-25°C) / Z(+20°C)	4	3	2	2	2	2							
Endurance	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					
									tan δ	300% or less than the initial specified 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.														
									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					

※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

■ 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

● 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

● Dimension table in next page.

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■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D $\times$ L (mm)	$\tan \delta$	Leakage Current (μ A) (at 20°C after 2 minutes)	Rated Ripple (mA _{rms}) (105°C/120Hz)	Part Number
6.3 (0J)	22	4 $\times$ 7	0.32	4.158	22	UCB0J220MCL1GS
	47	5 $\times$ 7	0.32	8.883	36	UCB0J470MCL1GS
	100	6.3 $\times$ 7	0.32	18.9	60	UCB0J101MCL1GS
	220	6.3 $\times$ 8.7	0.32	41.58	101	UCB0J221MCL1GS
	330	8 $\times$ 10	0.32	62.37	160	UCB0J331MNL1GS
	1000	10 $\times$ 10	0.32	189	313	UCB0J102MNL1GS
10 (1A)	33	5 $\times$ 7	0.28	9.9	35	UCB1A330MCL1GS
	220	8 $\times$ 10	0.28	66	141	UCB1A221MNL1GS
16 (1C)	10	4 $\times$ 7	0.26	4.8	18	UCB1C100MCL1GS
	22	5 $\times$ 7	0.26	10.56	30	UCB1C220MCL1GS
	47	6.3 $\times$ 7	0.26	22.56	50	UCB1C470MCL1GS
	100	6.3 $\times$ 8.7	0.26	48	81	UCB1C101MCL1GS
	470	10 $\times$ 10	0.26	225.6	254	UCB1C471MNL1GS
25 (1E)	33	6.3 $\times$ 7	0.16	24.75	48	UCB1E330MCL1GS
	47	6.3 $\times$ 8.7	0.16	35.25	63	UCB1E470MCL1GS
	100	8 $\times$ 10	0.16	75	116	UCB1E101MNL1GS
35 (1V)	1	4 $\times$ 7	0.14	4	6.2	UCB1V010MCL1GS
	2.2	4 $\times$ 7	0.14	4	11	UCB1V2R2MCL1GS
	3.3	4 $\times$ 7	0.14	4	14	UCB1V3R3MCL1GS
	4.7	4 $\times$ 7	0.14	4.935	15	UCB1V4R7MCL1GS
	10	5 $\times$ 7	0.14	10.5	25	UCB1V100MCL1GS
	22	6.3 $\times$ 7	0.14	23.1	42	UCB1V220MCL1GS
	33	6.3 $\times$ 8.7	0.14	34.65	57	UCB1V330MCL1GS
	220	10 $\times$ 10	0.14	231	216	UCB1V221MNL1GS
50 (1H)	33	8 $\times$ 10	0.14	49.5	77	UCB1H330MNL1GS
	47	8 $\times$ 10	0.14	70.5	92	UCB1H470MNL1GS
	100	10 $\times$ 10	0.14	150	151	UCB1H101MNL1GS

• For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.