

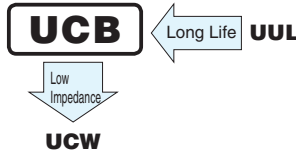
# ALUMINUM ELECTROLYTIC CAPACITORS

# UCB

Chip Type, Long Life Assurance



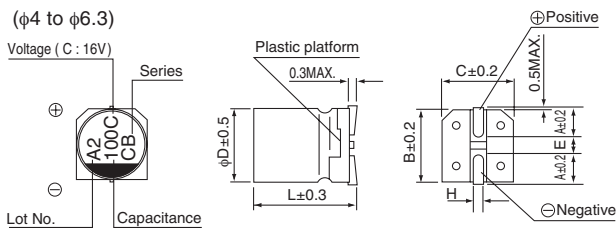
- Chip type with load life of 7000 hours at +105°C.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



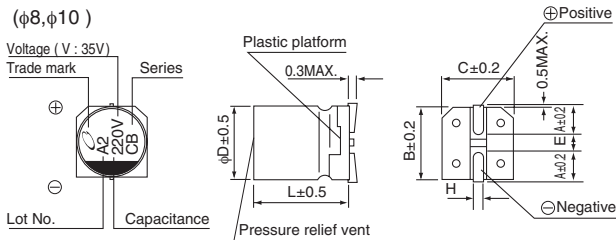
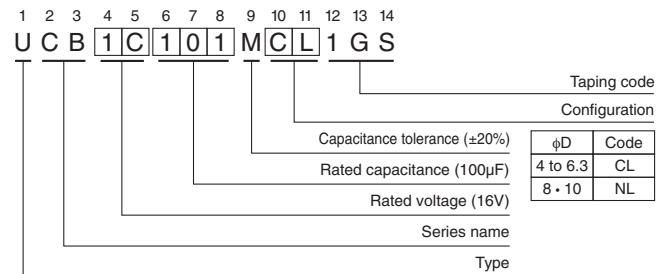
## Specifications

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
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					
	Leakage current	Less than or equal to 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.						
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					
	Leakage current	Less than or equal to the initial specified value					
Marking	Black print on the case top.						

## Chip Type



## Type numbering system (Example : 16V 100μF)



(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

## 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.

## UCB

## ■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance ( $\mu$ F)	Case Size $\phi$ D $\times$ L (mm)	$\tan \delta$	Leakage Current ( $\mu$ A) (at 20°C after 2 minutes)	Rated Ripple (mArms) (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.