

ALUMINUM ELECTROLYTIC CAPACITORS

UUL

Chip Type, Long Life Assurance



- Chip type with load life of 5000 hours at +105°C.
- Designed for surface mounting on high density PC board.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

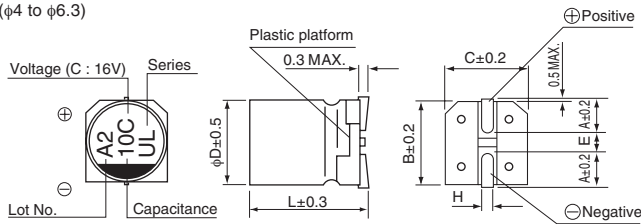


Specifications

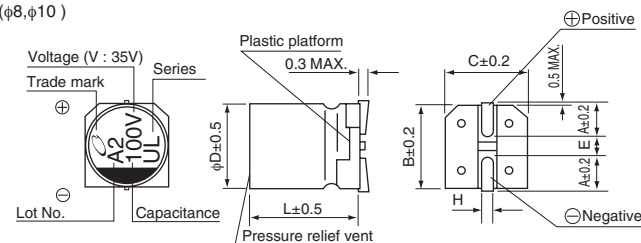
Item	Performance Characteristics								
Category Temperature Range	-40 to +105°C								
Rated Voltage Range	6.3 to 50V								
Rated Capacitance Range	1 to 1000μF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01 CV or 3 (μA), Max								
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	
	Impedance ratio	Z-25°C / Z+20°C	4	3	2	2	2	2	
Endurance	ZT / Z20 (MAX.)		Z-40°C / Z+20°C	10	7	5	3	3	3
	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 5000 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 specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 5000 hours at 105°C.		Capacitance change					Within ±10% of the initial capacitance value	
	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					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

(φ4 to φ6.3)



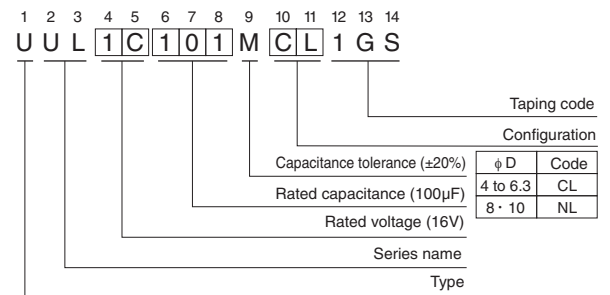
(φ8, φ10)



Voltage

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

Type numbering system (Example : 16V 100μF)



φ D × L	4 × 5.8	5 × 5.8	6.3 × 5.8	6.3 × 7.7	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	5.8	5.8	5.8	7.7	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

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 (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	Rated Ripple (mArms) (105°C/120Hz)	Part Number
6.3 (0J)	33	5×5.8	0.32	3	35	UUL0J330MCL1GS
	47	5×5.8	0.32	3	36	UUL0J470MCL1GS
	100	6.3×5.8	0.32	6.3	60	UUL0J101MCL1GS
	220	6.3×7.7	0.32	13.86	101	UUL0J221MCL1GS
	330	8×10	0.32	20.79	160	UUL0J331MNL1GS
	470	10×10	0.32	29.61	254	UUL0J471MNL1GS
	1000	10×10	0.32	63	313	UUL0J102MNL1GS
10 (1A)	22	5×5.8	0.24	3	30	UUL1A220MCL1GS
	33	5×5.8	0.24	3.3	35	UUL1A330MCL1GS
	47	6.3×5.8	0.24	4.7	50	UUL1A470MCL1GS
	100	6.3×7.7	0.24	10	81	UUL1A101MCL1GS
	220	8×10	0.24	22	141	UUL1A221MNL1GS
	330	10×10	0.24	33	238	UUL1A331MNL1GS
	470	10×10	0.24	47	254	UUL1A471MNL1GS
16 (1C)	10	4×5.8	0.20	3	18	UUL1C100MCL1GS
	22	5×5.8	0.20	3.52	30	UUL1C220MCL1GS
	33	6.3×5.8	0.20	5.28	48	UUL1C330MCL1GS
	47	6.3×5.8	0.20	7.52	50	UUL1C470MCL1GS
	100	6.3×7.7	0.20	16	81	UUL1C101MCL1GS
	220	10×10	0.20	35.2	216	UUL1C221MNL1GS
	330	10×10	0.20	52.8	238	UUL1C331MNL1GS
	470	10×10	0.20	75.2	254	UUL1C471MNL1GS
25 (1E)	10	5×5.8	0.16	3	25	UUL1E100MCL1GS
	22	6.3×5.8	0.16	5.5	42	UUL1E220MCL1GS
	33	6.3×5.8	0.16	8.25	48	UUL1E330MCL1GS
	47	6.3×7.7	0.16	11.75	63	UUL1E470MCL1GS
	100	8×10	0.16	25	116	UUL1E101MNL1GS
	220	10×10	0.16	55	216	UUL1E221MNL1GS
	330	10×10	0.16	82.5	238	UUL1E331MNL1GS
35 (1V)	4.7	4×5.8	0.13	3	15	UUL1V470MCL1GS
	10	5×5.8	0.13	3.5	25	UUL1V100MCL1GS
	22	6.3×5.8	0.13	7.7	42	UUL1V220MCL1GS
	33	6.3×7.7	0.13	11.55	57	UUL1V330MCL1GS
	47	8×10	0.13	16.45	92	UUL1V470MNL1GS
	100	10×10	0.13	35	151	UUL1V101MNL1GS
	220	10×10	0.13	77	216	UUL1V221MNL1GS
50 (1H)	1	4×5.8	0.12	3	6.2	UUL1H010MCL1GS
	2.2	4×5.8	0.12	3	11	UUL1H2R2MCL1GS
	3.3	4×5.8	0.12	3	14	UUL1H3R3MCL1GS
	4.7	5×5.8	0.12	3	19	UUL1H4R7MCL1GS
	10	6.3×5.8	0.12	5	30	UUL1H100MCL1GS
	22	6.3×7.7	0.12	11	49	UUL1H220MCL1GS
	33	8×10	0.12	16.5	77	UUL1H330MNL1GS
	47	8×10	0.12	23.5	92	UUL1H470MNL1GS
	100	10×10	0.12	50	151	UUL1H101MNL1GS

- Taping specifications are given in page 20.
- Recommended land size, soldering by reflow are given in page 16, 17.
- Please refer to page 3 for the minimum order quantity.