

ALUMINUM ELECTROLYTIC CAPACITORS



UL series 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 (2002/95/EC).

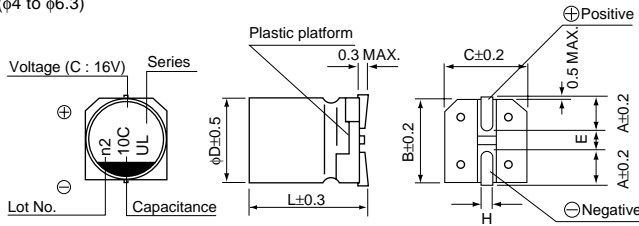


Specifications

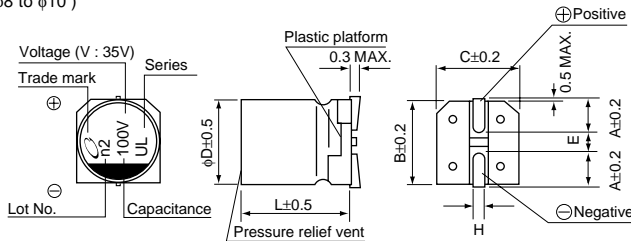
Item	Performance Characteristics							
Category Temperature Range	-40 to +105°C							
Rated Voltage Range	6.3 to 50V							
Rated Capacitance Range	0.1 to 1000μF							
Capacitance Tolerance	±20% at 120Hz, 20°C							
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01 CV or 3 (μA), Max							
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz, Temperature : 20°C							
	Rated voltage (V)	6.3	10	16	25	35	50	
Stability at Low Temperature	tan δ (MAX.)	0.32	0.24	0.20	0.16	0.13	0.12	
	Measurement frequency : 120Hz							
	Rated voltage (V)	6.3	10	16	25	35	50	
Endurance	Impedance ratio	Z-25°C / Z+20°C	4	3	2	2	2	
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	10	7	5	3	3	
Shelf Life	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
			tan δ					300% or less than the initial specified value
Resistance to soldering heat			Leakage current					Less than or equal to the initial specified value
			Capacitance change					Within ±10% of the initial capacitance value
Marking			tan δ					Less than or equal to the initial specified value
			Leakage current					Less than or equal to the initial specified value

Chip Type

(φ4 to φ6.3)

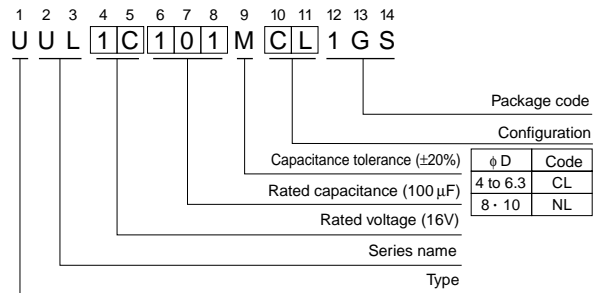


(φ8 to φ10)



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

Type numbering system (Example : 16V 100μF)



φD × 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

● Dimension table in next page.

■Dimensions

Cap. (μ F)	Code	V		6.3		10		16		25		35		50	
		Code		0J		1A		1C		1E		1V		1H	
0.1	0R1													4×5.8	1.0
0.22	R22													4×5.8	2.6
0.33	R33													4×5.8	3.2
0.47	R47													4×5.8	3.8
1	010													4×5.8	6.2
2.2	2R2													4×5.8	11
3.3	3R3													4×5.8	14
4.7	4R7											4×5.8	15	5×5.8	19
10	100						4×5.8	18	5×5.8	25	5×5.8	25	6.3×5.8	30	
22	220			5×5.8	30	5×5.8	30	6.3×5.8	42	6.3×5.8	42	6.3×7.7	49		
33	330	5×5.8	35	5×5.8	35	6.3×5.8	48	6.3×5.8	48	6.3×7.7	57	8×10	77		
47	470	5×5.8	36	6.3×5.8	50	6.3×5.8	50	6.3×7.7	63	8×10	92	8×10	92		
100	101	6.3×5.8	60	6.3×7.7	81	6.3×7.7	81	8×10	116	10×10	151	10×10	151		
220	221	6.3×7.7	101	8×10	141	10×10	216	10×10	216	10×10	216				
330	331	8×10	160	10×10	238	10×10	238	10×10	238						
470	471	10×10	254	10×10	254	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.