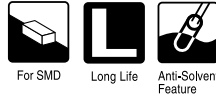
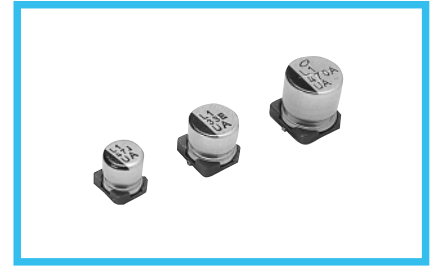


UA 6mmL Chip Type, Long Life Assurance
series



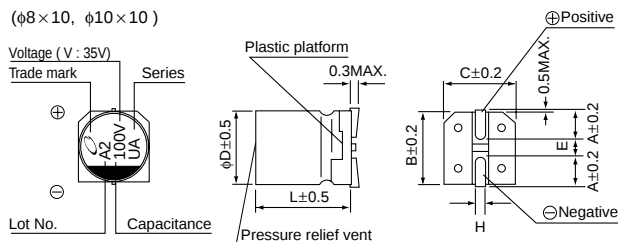
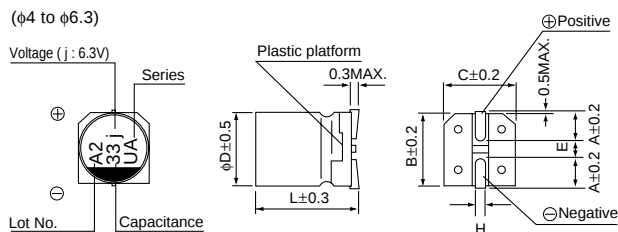
- Chip type with load life of 3000 to 5000 hours at +105°C.
- Designed for surface mounting on high density PC board.
- Compliant to the RoHS directive (2011/65/EU).



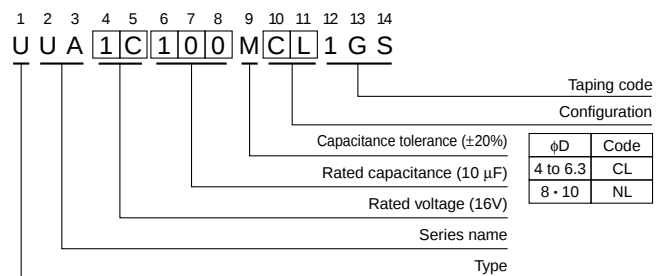
Specifications

Item	Performance Characteristics												
Category Temperature Range	-55 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) , 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.)	0.28	0.24	0.20	0.16	0.13	0.12						
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					
	ZT / Z20 (MAX.)	Z-55°C / Z+20°C	10	7	5	3	3	3					
Endurance	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 (3000 hours for ϕD = 4, 5 and 6.3) 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 10μF)



	(mm)					
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

Voltage

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

● Dimension table in next page.

UA series

■Dimensions

Cap.(μF)	V Code	6.3		10		16		25		35		50	
		0J		1A		1C		1E		1V		1H	
0.1	0R1											4×5.8	1
0.22	R22											4×5.8	2.6
0.33	R33											4×5.8	3.2
0.47	R47											4×5.8	5
1	010											4×5.8	8
2.2	2R2											4×5.8	12
3.3	3R3											4×5.8	17
4.7	4R7									4×5.8	16	5×5.8	22
10	100					4×5.8	18	5×5.8	27	5×5.8	27	6.3×5.8	32
22	220	4×5.8	22	5×5.8	30	5×5.8	30	6.3×5.8	44	6.3×5.8	44	6.3×7.7	58
33	330	5×5.8	35	5×5.8	35	6.3×5.8	48	6.3×5.8	50	6.3×7.7	57	8×10	140
47	470	5×5.8	38	6.3×5.8	50	6.3×5.8	50	6.3×7.7	63	8×10	92	8×10	170
100	101	6.3×5.8	69	6.3×7.7	81	6.3×7.7	81	8×10	116	10×10	151	10×10	310
220	221	6.3×7.7	120	8×10	141	10×10	216	10×10	320	10×10	375		
330	331	8×10	290	10×10	290	10×10	290	10×10	450				
470	471	10×10	320	10×10	320	10×10	320						
1000	102	10×10	410									Case size φD×L (mm)	Rated ripple

Rated ripple current (mA rms) 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.