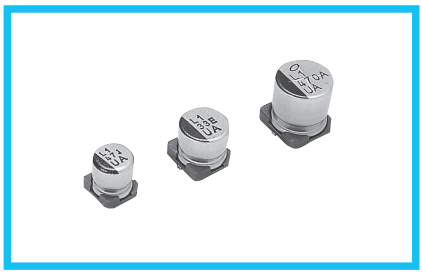
nichicon

UUA

6mmL Chip Type, Long Life Assurance

For SMD | Long Life | Anti-Solvent Feature



- 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).

Values marked with an ※ in the dimension table are scheduled to be discontinued and are not recommended for new designs.

UUL Long Life **UUA** Long Life UUT

■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 ZT / Z20 (MAX.)	Z−25°C / Z+20°C	4	3	2	2	2	2
	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.

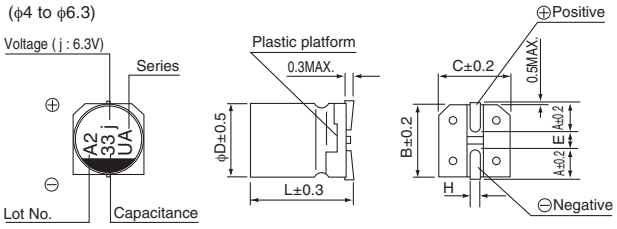
Resistance to soldering heat — The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.

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

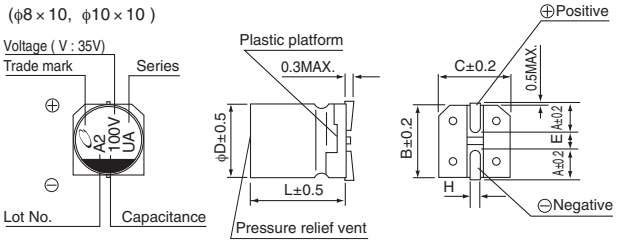
Marking — Black print on the case top.

■Chip Type

(φ4 to φ6.3)



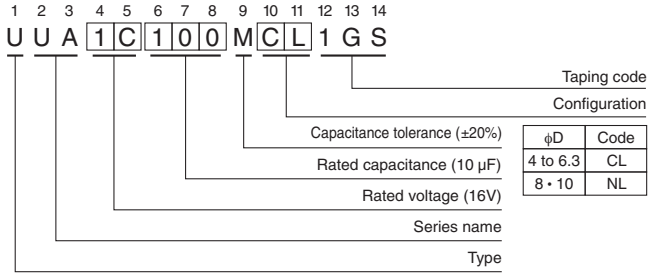
(φ8 × 10, φ10 × 10)



Voltage

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

Type numbering system (Example : 16V 10μF)



φD	Code
4 to 6.3	CL
8・10	NL

(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

●Dimension table in next page.

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■ 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						Rated ripple
1000	102	10×10	410									Case size φD×L (mm)	

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.