ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UT 6mmL Chip Type, Wide Temperature Range series

For SMD | Anti-Solvent Feature

- Chip type with load life 2000 hours at +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2002/95/EC).

UA Long Life
UX Higher C/V
UT
Long Life WT

■Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105°C
Rated Voltage Range	4 to 50V
Rated Capacitance Range	0.1 to 100μF
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, Temperature : 20°C

Rated voltage (V)	4	6.3	10	16	25	35	50
tan δ (MAX.)	0.37	0.28	0.24	0.20	0.16	0.13	0.12

Stability at Low Temperature — Measurement frequency :120Hz

Rated voltage (V)		4	6.3	10	16	25	35	50
Impedance ratio ZT / Z20 (MAX.)	Z−25°C / Z+20°C	6	3	3	2	2	2	2
	Z−40°C / Z+20°C	12	8	5	4	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 2000 hours at 105°C.

Capacitance change	Within ±25% of initial value (16V or less) Within ±20% of initial value (25V or more)
tan δ	200% or less of initial specified value
Leakage current	Less than or equal to the initial specified value

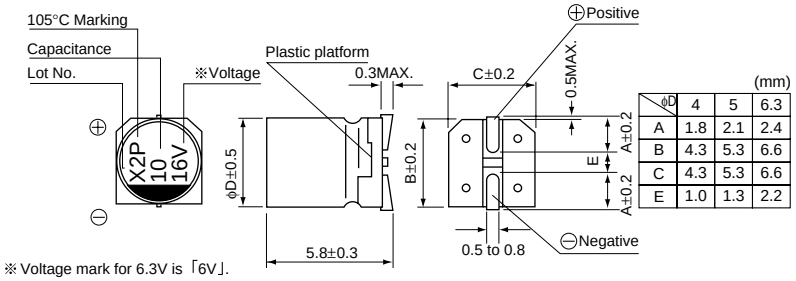
Shelf Life — After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.

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

Capacitance change	Within ±10% of initial 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



(mm)

φD	4	5	6.3
A	1.8	2.1	2.4
B	4.3	5.3	6.6
C	4.3	5.3	6.6
E	1.0	1.3	2.2

※Voltage mark for 6.3V is「6V」.

Type numbering system (Example : 16V 10μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	U	T	1	C	1	0	0	M	C	L	1	G	S

14 Taping code
13 Configuration
9 Capacitance tolerance (±20%)
6 7 8 Rated Capacitance (10μF)
4 5 Rated voltage (16V)
2 3 Series name
1 Type

■Dimensions

Cap.(μF) \ V / Code	4		6.3		10		16		25		35		50	
	0G		0J		1A		1C		1E		1V		1H	
0.1	0R1												4	1.0
0.22	R22												4	2.6
0.33	R33												4	3.2
0.47	R47												4	3.8
1	010												4	6.2
2.2	2R2												4	11
3.3	3R3												4	14
4.7	4R7									4	13	4	15	5	19
10	100						4	18	5	23	5	25	6.3	30
22	220	4	22	4	22	5	27	5	30	6.3	38	6.3	42		
33	330	5	30	5	30	5	35	6.3	40	6.3	48				
47	470	5	36	5	36	6.3	46	6.3	50						Rated ripple
100	101	6.3	60	6.3	60	6.3	60							Case size φD (mm)	

Rated Ripple (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 select UX(p.90), UJ(p.92) series if high C/V products are required.
- Please refer to page 3 for the minimum order quantity.