ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UT series — 6mmL Chip Type, Wide Temperature Range

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.

■Specifications

Item	Performance Characteristics
Category Temperature Range	–55 ~ +105°C
Rated Voltage Range	4 ~ 50V
Rated Capacitance Range	0.1 ~ 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.
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 — After 2000 hours' application of rated voltage at 105°C , capacitors meet the characteristics requirements listed at right.

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	Initial specified value or less

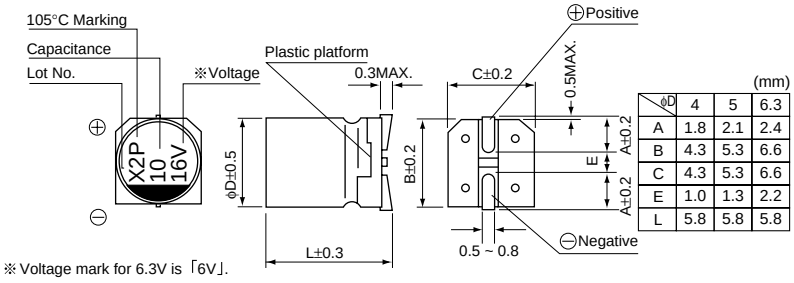
Shelf Life — After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for endurance characteristics listed above.

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 and restored at room temperature, they meet the characteristics requirements listed at right.

Capacitance change	Within ±10% of initial value
tan δ	Initial specified value or less
Leakage current	Initial specified value or less

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
L	5.8	5.8	5.8

※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	R	1	G	S

- 14: Taping code
- 12–13: Configuration
- 9–11: Capacitance tolerance (±20%)
- 6–8: Rated Capacitance (10μF)
- 4–5: Rated voltage (16V)
- 3: Series name
- 1–2: Type

■Dimensions

V	4		6.3		10		16		25		35		50	
Cap.(μF) Code	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	

Rated Ripple (mA rms) at 105°C 120Hz

■Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz ~
Coefficient	0.70	1.00	1.17	1.36	1.50

■ Taping Specifications are given in page 21.

Please refer to page 3 for the minimum order quantity.