ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UUT

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 fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.

■Specifications

Item	Performance Characteristics
Category Temperature Range	–55 to +105°C
Rated Voltage Range	4 to 50V
Rated Capacitance Range	1 to 100μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	After 2 minutes' application of rated voltage at 20°C, 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 (see table below)
Stability at Low Temperature	Measurement frequency :120Hz (see table below)
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. (see table below)
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. (see table below)
Marking	Black print on the case top.

Tangent of loss angle (tan δ) — Measurement frequency :120Hz at 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

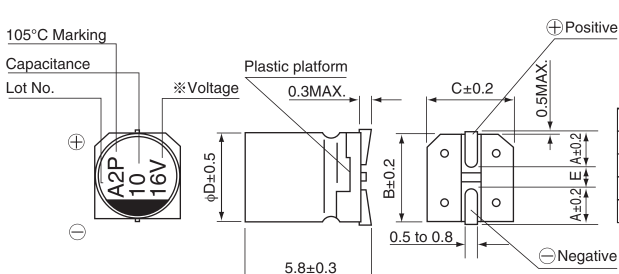
Endurance

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

Resistance to soldering heat

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

■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

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

■Dimensions

Cap.(μF)	Code \ V	4 (0G) φD	4 (0G) ripple	6.3 (0J) φD	6.3 (0J) ripple	10 (1A) φD	10 (1A) ripple	16 (1C) φD	16 (1C) ripple	25 (1E) φD	25 (1E) ripple	35 (1V) φD	35 (1V) ripple	50 (1H) φD	50 (1H) ripple
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						
100	101	6.3	60	6.3	60	6.3	60							Case size φD (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 select UUX(p.170), UUJ(p.176) if high C/V products are required.
- Please refer to page 3 for the minimum order quantity.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Nichicon:

UUT1C470MCL1GS UUT1E330MCL1GS UUT0J101MCL1GS UUT1A101MCL1GS UUT1C100MCL1GS UUT1E100MCL1GS UUT1H100MCL1GS UUT1H2R2MCL1GS UUT0G220MCL1GS UUT0G330MCL1GS UUT0G470MCL1GS UUT0G101MCL1GS UUT0J220MCL1GS UUT0J330MCL1GS UUT0J470MCL1GS UUT1A220MCL1GS UUT1A330MCL1GS UUT1A470MCL1GS UUT1C220MCL1GS UUT1C330MCL1GS UUT1E4R7MCL1GS UUT1E220MCL1GS UUT1V100MCL1GS UUT1V220MCL1GS UUT1H0R1MCL1GS UUT1HR22MCL1GS UUT1HR33MCL1GS UUT1HR47MCL1GS UUT1H010MCL1GS UUT1H3R3MCL1GS UUT1H4R7MCL1GS UUT1V220MCL1MS UUR2A4R7MCL6GS