ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UZT

4.5mmL Chip Type, Wide Temperature Range

For SMD | Smaller | Anti-Solvent Feature

- Chip type with 4.5mm height, operating over wide temperature range of −40 to +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.

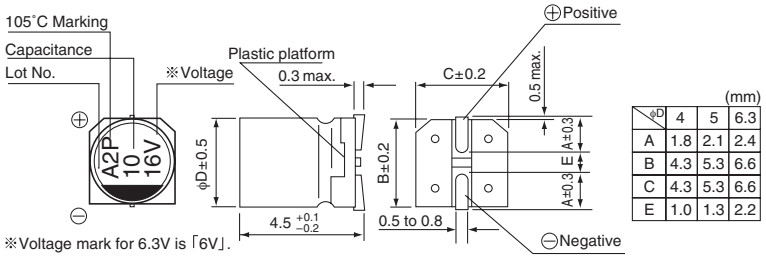
UWT
Smaller
UZT
Smaller
UZG

■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +105°C
Rated Voltage Range	6.3 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 0.01CV 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.): 0.38 / 0.32 / 0.20 / 0.16 / 0.14 / 0.14
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): 6 / 5 / 3 / 3 / 3 / 3 Z(−40°C) / Z(+20°C): 10 / 10 / 6 / 6 / 4 / 4
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 105°C. Capacitance change: Within ±25% of the initial capacitance value (16V or less) Within ±20% of the initial capacitance value (25V or more) tan δ: 300% or less than 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.

※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

■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

Type numbering system (Example : 16V 10μF)

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

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

●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

●Dimension table in next page.

UZT

■Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20℃ after 2 minutes)	Rated Ripple (mArms) (105℃/120Hz)	Part Number
6.3 (0J)	22	4×4.5	0.38	3	19	UZT0J220MCL1GB
	33	5×4.5	0.38	3	26	UZT0J330MCL1GB
	47	5×4.5	0.38	3	32	UZT0J470MCL1GB
	100	6.3×4.5	0.38	6.3	52	UZT0J101MCL1GB
10 (1A)	22	5×4.5	0.32	3	24	UZT1A220MCL1GB
	33	5×4.5	0.32	3.3	30	UZT1A330MCL1GB
	47	6.3×4.5	0.32	4.7	40	UZT1A470MCL1GB
16 (1C)	10	4×4.5	0.20	3	16	UZT1C100MCL1GB
	22	5×4.5	0.20	3.52	26	UZT1C220MCL1GB
	33	6.3×4.5	0.20	5.28	35	UZT1C330MCL1GB
	47	6.3×4.5	0.20	7.52	44	UZT1C470MCL1GB
25 (1E)	4.7	4×4.5	0.16	3	11	UZT1E4R7MCL1GB
	10	5×4.5	0.16	3	20	UZT1E100MCL1GB
	22	6.3×4.5	0.16	5.5	33	UZT1E220MCL1GB
	33	6.3×4.5	0.16	8.25	42	UZT1E330MCL1GB
35 (1V)	4.7	4×4.5	0.14	3	13	UZT1V4R7MCL1GB
	10	5×4.5	0.14	3.5	22	UZT1V100MCL1GB
	22	6.3×4.5	0.14	7.7	36	UZT1V220MCL1GB
50 (1H)	1	4×4.5	0.14	3	5.4	UZT1H010MCL1GB
	2.2	4×4.5	0.14	3	9.6	UZT1H2R2MCL1GB
	3.3	4×4.5	0.14	3	12	UZT1H3R3MCL1GB
	4.7	5×4.5	0.14	3	16	UZT1H4R7MCL1GB
	10	6.3×4.5	0.14	5	26	UZT1H100MCL1GB

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.
- Please select UUX, UUJ series if high C/V products are required.