ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

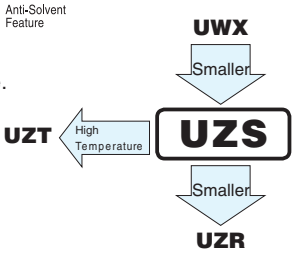
UZS

4.5mmL Chip Type

For SMD | Smaller | Anti-Solvent Feature

- Chip type with 4.5mm height.
- 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.

Products which are scheduled to be discontinued.
Not recommended for new designs.





■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to + 85°C
Rated Voltage Range	4 to 50V
Rated Capacitance Range	1 to 220μF
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

Rated voltage (V)	4	6.3	10	16	25	35	50
tan δ (max.)	0.50	0.30	0.24	0.19	0.16	0.14	0.14

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)	7	4	3	2	2	2	2
	Z(−40°C) / Z(+20°C)	15	8	8	4	4	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 85°C.

Capacitance change	Within ±20% of the initial capacitance value
tan δ	200% 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 85°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.

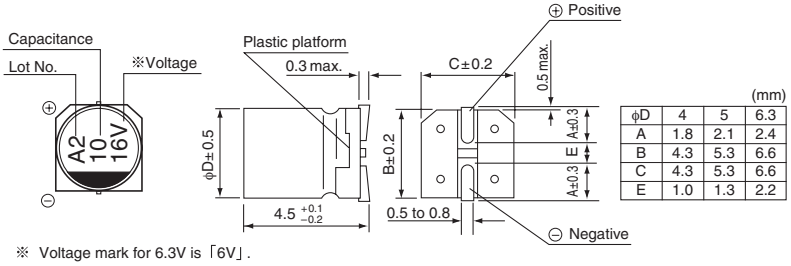
Capacitance change	Within ±10% of the initial capacitance value
tan δ	Less than or equal to the initial specified value
Leakage current	Less than or equal to the initial specified value

Marking

Black print on the case top.

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

■Chip Type

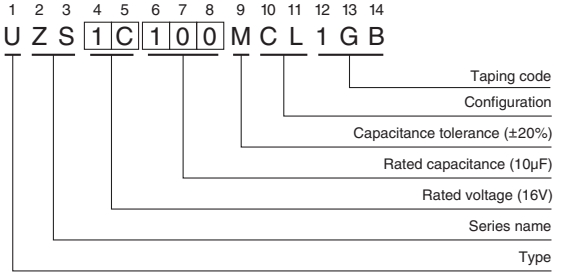


(mm)

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

※ Voltage mark for 6.3V is「6V」.

Type numbering system (Example : 16V 10μF)



● 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.

UZS

■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) (85℃/120Hz)	Part Number
4 (0G)	33	4×4.5	0.50	3	28	UZS0G330MCL1GB
	47	4×4.5	0.50	3	33	UZS0G470MCL1GB
	100	5×4.5	0.50	4	56	UZS0G101MCL1GB
	220	6.3×4.5	0.50	8.8	96	UZS0G221MCL1GB
6.3 (0J)	22	4×4.5	0.30	3	28	UZS0J220MCL1GB
	33	5×4.5	0.30	3	37	UZS0J330MCL1GB
	47	5×4.5	0.30	3	45	UZS0J470MCL1GB
	100	6.3×4.5	0.30	6.3	70	UZS0J101MCL1GB
10 (1A)	22	5×4.5	0.24	3	33	UZS1A220MCL1GB
	33	5×4.5	0.24	3.3	41	UZS1A330MCL1GB
	47	6.3×4.5	0.24	4.7	52	UZS1A470MCL1GB
16 (1C)	10	4×4.5	0.19	3	23	UZS1C100MCL1GB
	22	5×4.5	0.19	3.52	37	UZS1C220MCL1GB
	33	6.3×4.5	0.19	5.28	49	UZS1C330MCL1GB
	47	6.3×4.5	0.19	7.52	58	UZS1C470MCL1GB
25 (1E)	4.7	4×4.5	0.16	3	16	UZS1E4R7MCL1GB
	10	5×4.5	0.16	3	27	UZS1E100MCL1GB
	22	6.3×4.5	0.16	5.5	42	UZS1E220MCL1GB
	33	6.3×4.5	0.16	8.25	52	UZS1E330MCL1GB
35 (1V)	4.7	4×4.5	0.14	3	18	UZS1V4R7MCL1GB
	10	5×4.5	0.14	3.5	29	UZS1V100MCL1GB
	22	6.3×4.5	0.14	7.7	46	UZS1V220MCL1GB
50 (1H)	1	4×4.5	0.14	3	8.4	UZS1H010MCL1GB
	2.2	4×4.5	0.14	3	13	UZS1H2R2MCL1GB
	3.3	4×4.5	0.14	3	17	UZS1H3R3MCL1GB
	4.7	5×4.5	0.14	3	20	UZS1H4R7MCL1GB
	10	6.3×4.5	0.14	5	33	UZS1H100MCL1GB

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