ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UUB

Chip Type, High Reliability

For SMD | Long Life | Anti-Solvent Feature (Through 50V only)

- Chip type, high temperature range, for +125°C use.
- 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.

UWH: High Temperature Reflow
ULT: High Voltage
UCJ: Added ESR specification at −40°C
UUX: High Temperature



■Specifications

Item	Performance Characteristics
Category Temperature Range	−40 to +125°C
Rated Voltage Range	10 to 400V
Rated Capacitance Range	1 to 330μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	Rated voltage (V): 10 to 50 / 160 to 400 Leakage Current: After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03CV (μA). / I = 0.04CV+100 (μA) max.(1 minute's at 20°C)
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C

Rated voltage (V)	10	16	25	35	50	160	200	250	400
tan δ (MAX.)	0.32	0.24	0.21	0.18	0.18	0.30	0.30	0.30	0.30

Stability at Low Temperature — Measurement frequency : 120Hz

Rated voltage (V)		10	16	25	35	50	160	200	250	400
Impedance ratio ZT / Z20 (MAX.)	Z−40°C / Z+20°C	12	8	6	4	4	8	8	8	12

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 (1000 hours for φ8 × 6.2) at 125°C.

Capacitance change	Within ±30% of the initial capacitance value
tan δ	300% or less than the intial specified value
Leakage current	Less than or equal to the initial specified value

Shelf Life

After storing the capacitors under no load at 125°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.

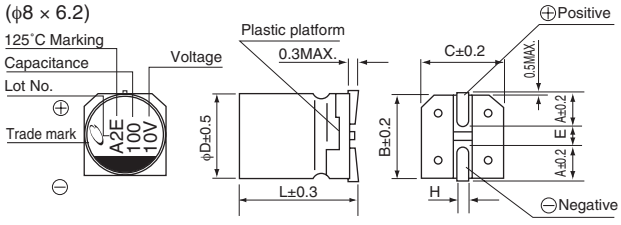
Capacitance change	Within ±10% of the initial capacitance value
tan δ	Less than or equal to the initial specified value
Leakage current	Less than or equal to the initial specified value

Marking

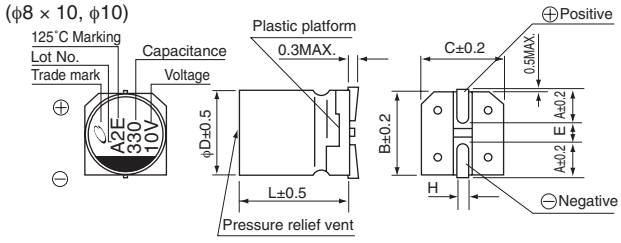
Black print on the case top.

■Chip Type

(φ8 × 6.2)



(φ8 × 10, φ10)



(mm)

φD × L	8 × 6.2	8 × 10	10 × 10
A	3.3	2.9	3.2
B	8.3	8.3	10.3
C	8.3	8.3	10.3
E	2.3	3.1	4.5
L	6.2	10	10
H	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

Type numbering system (Example : 10V 100μF)

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

- 1 2 3: Type
- 4 5: Series name
- 6 7 8: Rated voltage (10V)
- 9: Rated capacitance (100μF)
- 10: Capacitance tolerance (±20%)
- 11: Configuration

φD × L	Code
8 × 6.2	CL
8 × 10	NL
10 × 10	NL

- 12 13 14: Taping code

●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.

UUB

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20℃ after 1 minute)	Rated Ripple (mArms) (125℃/120Hz)	Part Number
10 (1A)	100	8×6.2	0.32	30	58	UUB1A101MCL1GS
	220	8×10	0.32	66	90	UUB1A221MNL1GS
	330	10×10	0.32	99	112	UUB1A331MNL1GS
16 (1C)	100	8×10	0.24	48	66	UUB1C101MNL1GS
	220	10×10	0.24	105.6	102	UUB1C221MNL1GS
25 (1E)	47	8×6.2	0.21	35.25	48	UUB1E470MCL1GS
	100	8×10	0.21	75	74	UUB1E101MNL1GS
	220	10×10	0.21	165	116	UUB1E221MNL1GS
35 (1V)	33	8×6.2	0.18	34.65	44	UUB1V330MCL1GS
	47	8×10	0.18	49.35	52	UUB1V470MNL1GS
	100	10×10	0.18	105	80	UUB1V101MNL1GS
50 (1H)	10	8×6.2	0.18	15	24	UUB1H100MCL1GS
	22	8×6.2	0.18	33	38	UUB1H220MCL1GS
	33	8×10	0.18	49.5	46	UUB1H330MNL1GS
	47	10×10	0.18	70.5	58	UUB1H470MNL1GS
160 (2C)	6.8	8×10	0.30	143.52	42	UUB2C6R8MNL1GS
	10	10×10	0.30	164	59	UUB2C100MNL1GS
200 (2D)	4.7	8×10	0.30	137.6	36	UUB2D4R7MNL1GS
	6.8	10×10	0.30	154.4	59	UUB2D6R8MNL1GS
	10	10×10	0.30	180	59	UUB2D100MNL1GS
250 (2E)	3.3	8×10	0.30	133	28	UUB2E3R3MNL1GS
	4.7	10×10	0.30	147	59	UUB2E4R7MNL1GS
400 (2G)	1	8×10	0.30	116	26	UUB2G010MNL1GS
	1.8	8×10	0.30	128.8	27	UUB2G1R8MNL1GS
	2.2	10×10	0.30	135.2	36	UUB2G2R2MNL1GS
	3.3	10×10	0.30	152.8	38	UUB2G3R3MNL1GS

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.