ALUMINUM ELECTROLYTIC CAPACITORS

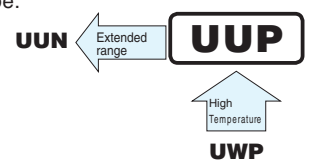
nichicon

UUP

6mmL Chip Type, Bi-Polarized

For SMD | Bi-polarized

- Chip type, bi-polarized withstanding high temperature range up 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 Qualified. Please contact us for details.

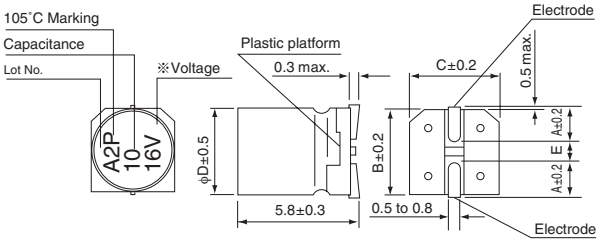


■Specifications

Item	Performance Characteristics
Category Temperature Range	−55 to +105°C
Rated Voltage Range	6.3 to 50V
Rated Capacitance Range	0.1 to 47μF
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 0.05 CV or 10 (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.) 0.24 / 0.20 / 0.17 / 0.17 / 0.15 / 0.15
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) 4 / 3 / 2 / 2 / 2 / 2 Z(−40°C) / Z(+20°C) 8 / 6 / 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 1000 hours at 105°C with the polarity every 250 hours. 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 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

※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	P	1	C	1	0	0	M	C	L	1	G	S

- 14: Taping code
- 12 13: Configuration
- 9: Capacitance tolerance (±20%)
- 6 7 8: Rated capacitance (10μF)
- 4 5: Rated voltage (16V)
- 3: Series name
- 1 2: 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.

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■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	5×5.8	0.24	10	28	UUP0J220MCL1GS
	33	6.3×5.8	0.24	10.395	37	UUP0J330MCL1GS
	47	6.3×5.8	0.24	14.805	45	UUP0J470MCL1GS
10 (1A)	10	4×5.8	0.20	10	17	UUP1A100MCL1GS
	22	6.3×5.8	0.20	11	33	UUP1A220MCL1GS
	33	6.3×5.8	0.20	16.5	41	UUP1A330MCL1GS
16 (1C)	4.7	4×5.8	0.17	10	12	UUP1C4R7MCL1GS
	10	5×5.8	0.17	10	23	UUP1C100MCL1GS
	22	6.3×5.8	0.17	17.6	37	UUP1C220MCL1GS
	33	6.3×5.8	0.17	26.4	49	UUP1C330MCL1GS
25 (1E)	3.3	5×5.8	0.17	10	12	UUP1E3R3MCL1GS
	4.7	5×5.8	0.17	10	16	UUP1E4R7MCL1GS
	10	6.3×5.8	0.17	12.5	27	UUP1E100MCL1GS
35 (1V)	2.2	4×5.8	0.15	10	8.4	UUP1V2R2MCL1GS
	3.3	5×5.8	0.15	10	16	UUP1V3R3MCL1GS
	4.7	5×5.8	0.15	10	18	UUP1V4R7MCL1GS
	10	6.3×5.8	0.15	17.5	29	UUP1V100MCL1GS
50 (1H)	0.1	4×5.8	0.15	10	1.0	UUP1H0R1MCL1GS
	0.22	4×5.8	0.15	10	2.0	UUP1HR22MCL1GS
	0.33	4×5.8	0.15	10	2.8	UUP1HR33MCL1GS
	0.47	4×5.8	0.15	10	4.0	UUP1HR47MCL1GS
	1	4×5.8	0.15	10	8.4	UUP1H010MCL1GS
	2.2	5×5.8	0.15	10	13	UUP1H2R2MCL1GS
	3.3	5×5.8	0.15	10	17	UUP1H3R3MCL1GS
	4.7	6.3×5.8	0.15	11.75	20	UUP1H4R7MCL1GS

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