

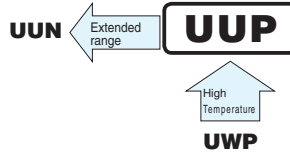
# ALUMINUM ELECTROLYTIC CAPACITORS

# UUP

6mmL Chip Type, 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.

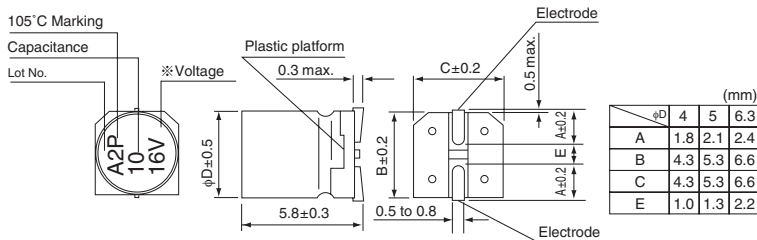


## Specifications

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 Z(-25°C) / Z(+20°C)	4	3	2	2	2	2
	ZT / Z20 (max.) 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			
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.		Leakage current	Less than or equal to the initial specified value			
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			
Marking	Black print on the case top.		Leakage current	Less than or equal to the initial specified value			

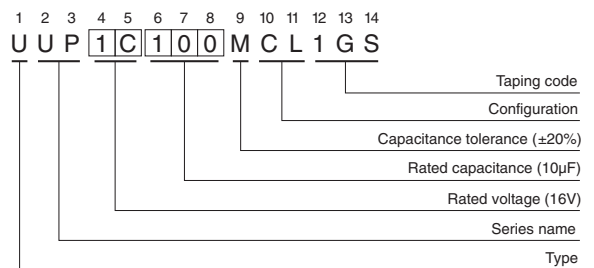
※ I : Leakage Current (μA), C : Rated Capacitance (μF), V : Rated Voltage (V)

## Chip Type



※ 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.

## UUP

## ■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance ( $\mu$ F)	Case Size $\phi$ D $\times$ L (mm)	tan $\delta$	Leakage Current ( $\mu$ A) (at 20°C after 2 minutes)	Rated Ripple (mArms) (105°C/120Hz)	Part Number
6.3 (0J)	22	5 $\times$ 5.8	0.24	10	28	UUP0J220MCL1GS
	33	6.3 $\times$ 5.8	0.24	10.395	37	UUP0J330MCL1GS
	47	6.3 $\times$ 5.8	0.24	14.805	45	UUP0J470MCL1GS
10 (1A)	10	4 $\times$ 5.8	0.20	10	17	UUP1A100MCL1GS
	22	6.3 $\times$ 5.8	0.20	11	33	UUP1A220MCL1GS
	33	6.3 $\times$ 5.8	0.20	16.5	41	UUP1A330MCL1GS
16 (1C)	4.7	4 $\times$ 5.8	0.17	10	12	UUP1C4R7MCL1GS
	10	5 $\times$ 5.8	0.17	10	23	UUP1C100MCL1GS
	22	6.3 $\times$ 5.8	0.17	17.6	37	UUP1C220MCL1GS
	33	6.3 $\times$ 5.8	0.17	26.4	49	UUP1C330MCL1GS
25 (1E)	3.3	5 $\times$ 5.8	0.17	10	12	UUP1E3R3MCL1GS
	4.7	5 $\times$ 5.8	0.17	10	16	UUP1E4R7MCL1GS
	10	6.3 $\times$ 5.8	0.17	12.5	27	UUP1E100MCL1GS
35 (1V)	2.2	4 $\times$ 5.8	0.15	10	8.4	UUP1V2R2MCL1GS
	3.3	5 $\times$ 5.8	0.15	10	16	UUP1V3R3MCL1GS
	4.7	5 $\times$ 5.8	0.15	10	18	UUP1V4R7MCL1GS
	10	6.3 $\times$ 5.8	0.15	17.5	29	UUP1V100MCL1GS
50 (1H)	0.1	4 $\times$ 5.8	0.15	10	1.0	UUP1H0R1MCL1GS
	0.22	4 $\times$ 5.8	0.15	10	2.0	UUP1HR22MCL1GS
	0.33	4 $\times$ 5.8	0.15	10	2.8	UUP1HR33MCL1GS
	0.47	4 $\times$ 5.8	0.15	10	4.0	UUP1HR47MCL1GS
	1	4 $\times$ 5.8	0.15	10	8.4	UUP1H010MCL1GS
	2.2	5 $\times$ 5.8	0.15	10	13	UUP1H2R2MCL1GS
	3.3	5 $\times$ 5.8	0.15	10	17	UUP1H3R3MCL1GS
	4.7	6.3 $\times$ 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.