

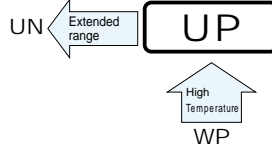
ALUMINUM ELECTROLYTIC CAPACITORS



UP series 6mmL Chip Type, Bi-Polarized



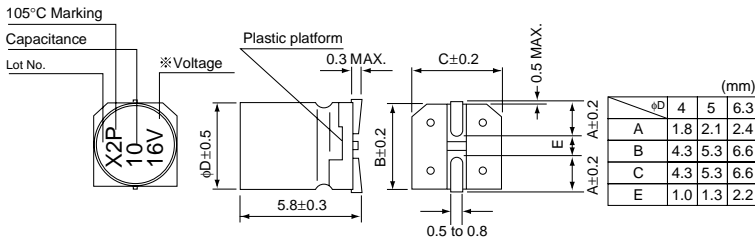
- Chip type, bi-polarized withstanding high temperature range up to +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2002/95/EC).



Specifications

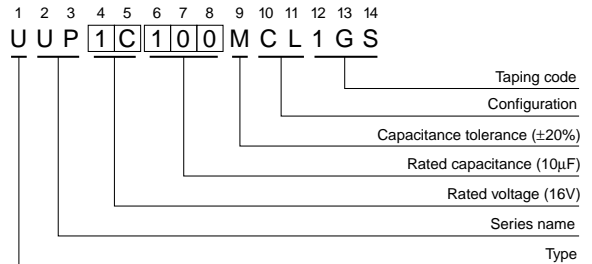
Item	Performance Characteristics						
Category Temperature Range	-55 to +105°C						
Rated Voltage Range	6.3 to 50V						
Rated Capacitance Range	0.1 to 47μF						
Capacitance Tolerance	±20% at 120Hz, 20°C						
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.05 CV or 10 (μA), whichever is greater.						
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz, Temperature : 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
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.						

Chip Type



※ Voltage mark for 6.3V is 「6V」

Type numbering system (Example : 16V 10μF)



Dimensions

Cap.(μF)	Code	V		6.3		10		16		25		35		50	
		0J	1A	1C	1E	1V	1H								
0.1	0R1													4	1.0
0.22	R22													4	2.0
0.33	R33													4	2.8
0.47	R47													4	4.0
1	010													4	8.4
2.2	2R2											4	8.4	5	13
3.3	3R3											5	16	5	17
4.7	4R7							4	12	5	12	5	16	5	17
10	100			4	17	5	23	5	16	5	16	5	18	6.3	20
22	220	5	28	6.3	33	6.3	37	6.3	27	6.3	27	6.3	29		
33	330	6.3	37	6.3	41	6.3	49								
47	470	6.3	45												

Rated ripple current (mArms) at 105°C 120Hz

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

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please select UN(p.110) series if high CV products are required.
- Please refer to page 3 for the minimum order quantity.

CAT.8100Z