

6mmL Chip Type, Bi-Polarized

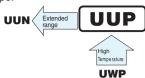








- Chip type, bi-polarized withstanding high temperature range up to +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).

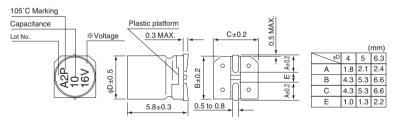




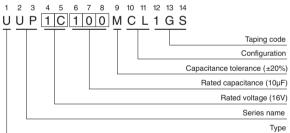
## ■ Specifications

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.												
	Measurement frequency : 120Hz at 20°C									2			
Tangent of loss angle (tan $\delta$ )	Rated voltage (V)	6.3	1	10		16 2		25 35		5	50		
	tan δ (MAX.)	0.24	0.20			0.17	0.17		0.15		0.15		
	Measurement frequency : 120Hz												
	Rated voltage (V) 6		6.	3	10	16		25	35	50	7		
Stability at Low Temperature	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 Capacitance change   Within ±20% of the initial capacitance value												
	when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at					tan δ			200% or less than the initial specified value				
	105°C with the pola			at	Lea	kage currer	nt	Les	s than or equ	ual to the i	nitial specified v	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.												
5	The capacitors are kept on a hot plate for 30 seconds, which is								pacitance c	hange	Within ±10% of the initial capacitance value		
Resistance to soldering heat	maintained at 250°C. The capacitors shall meet the characteristic							tan δ			Less than or equal to the initial specified value		
Ileat	requirements listed at right when they are removed from the plate and restored to 20°C.						aie	Lea	akage curre	nt	Less than or equal to the initial specified values		
Marking	Black print on the	case top.											

## ■Chip Type



Type numbering system (Example :  $16V 10\mu F$ )



## Dimensions

	V	6.	.3	1	0	1	6	2	5	3	5	5	0
Cap.(µF)	Code	0	J	1	A	1	С	1	E	1	V	1	Н
0.1	0R1								I I		İ	4	1.0
0.22	R22				l		1		İ		i	4	2.0
0.33	R33				l I		i i		I I		I I	4	2.8
0.47	R47				 		!		 		I I	4	4.0
1	010								İ			4	8.4
2.2	2R2				I I		i		I I	4	8.4	5	13
3.3	3R3				l I		!	5	12	5	16	5	17
4.7	4R7					4	12	5	16	5	18	6.3	20
10	100			4	17	5	23	6.3	27	6.3	29		
22	220	5	28	6.3	33	6.3	37		l I		I I		l I
33	330	6.3	37	6.3	41	6.3	49						Rated
47	470	6.3	45						İ			Case size	ripple

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please select UUN(p.160) if high CV products are required.
- Please refer to page 3 for the minimum order quantity.

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

Frequency coefficient of rated ripple current

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						