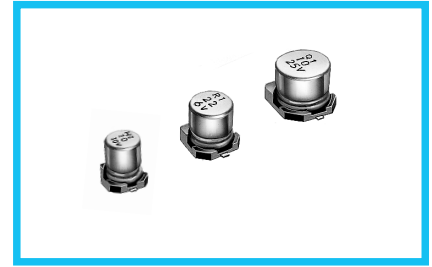
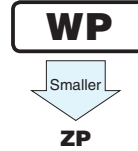


ALUMINUM ELECTROLYTIC CAPACITORS

WP series 5.5mmL Chip Type, Bi-Polarized



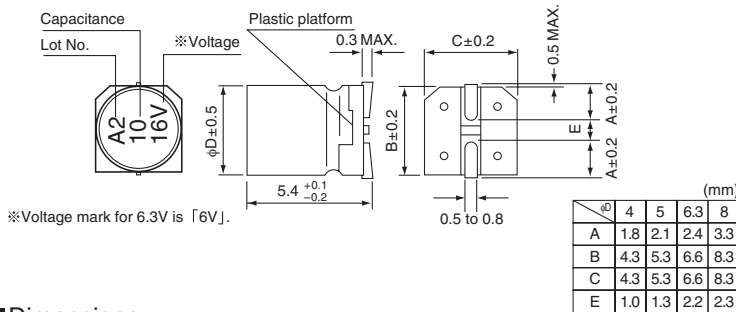
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).



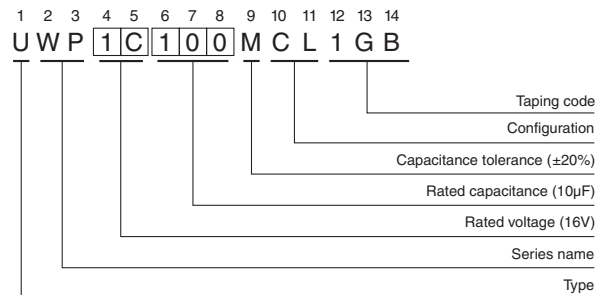
Specifications

Item	Performance Characteristics											
Category Temperature Range	-40 to +85°C											
Rated Voltage Range	6.3 to 50V											
Rated Capacitance Range	0.1 to 100μF											
Capacitance Tolerance	±20% at 120Hz, 20°C											
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.05CV 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					
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				
Endurance	ZT / Z20 (MAX.)		Z-40°C / Z+20°C	8	6	4	4	3	3			
	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 85°C with the polarity inverted every 250 hours.		Capacitance change					Within ±20% of the initial capacitance value				
Shelf Life	tan δ		200% or less than the initial specified value					Leakage current		Less than or equal to the initial specified value		
	Leakage current		Less than or equal to the initial specified value					After storing the capacitors under no load at 85°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	Capacitance change		Within ±10% of the initial capacitance value					tan δ		Less than or equal to the initial specified value		
	tan δ		Less than or equal to the initial specified value					Leakage current		Less than or equal to the initial specified value		
Marking	Leakage current		Less than or equal to the initial specified value					Black print on the case top.				
	Black print on the case top.											

Chip Type



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	OR1													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	12	5	16	5	17	5	17
4.7	4R7						4	12	5	16	5	18	5	20	6.3	20
10	100			4	17	5	23	6.3	27	6.3	29	8	36	8	36	
22	220	5	28	6.3	33	6.3	37	8	50	8	54					
33	330	6.3	37	6.3	41	6.3	49	8	61							
47	470	6.3	45	8	61	8	75									
100	101	8	82													

Rated ripple current (mA rms) at 85°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.162) series if high C/V products are required.
- Please refer to page 3 for the minimum order quantity.