# **ALUMINUM ELECTROLYTIC CAPACITORS**









- 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).

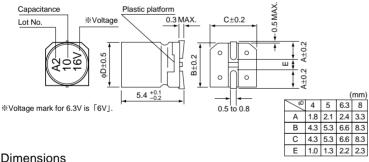




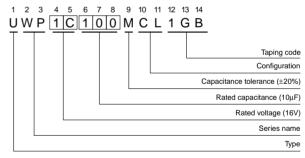
### ■Specifications

Item		Performance Characteristics									
Category Temperature Range	-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.										
	Measurement frequency : 120Hz at 20°C										
Category Temperature Range Rated Voltage Range Rated Capacitance Range Capacitance Tolerance	Rated voltage (V)	9 1 7		0	16	25	35		50		
	tan δ (MAX.)	tan δ (MAX.) 0.24 0.2		20	0.17	0.17	0.15	5	0.15		
	Measurement frequency: 120Hz										
Stability at Low Temperature	Rated	oltage (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	: 120Hz at 20°C  50  0.15  quency: 120Hz  50  2  3  of the initial capacitance valuant the initial specified valuated to the initial specified		
	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					
Endurance					tan δ	o ourront					
					Leakag	e current	surement frequency: 120Hz at 20°C    35	ppecilieu value			
Shelf Life	After storing the capacitors under no load at 85° C for 1000 hours and then performing voltage treatment based on JIS C 5101-4										
Onen Line	clause 4.1 at 20° C, they shall meet the specified values for the endurance characteristics listed above.										
•	The capacitors are kept on a hot plate for 30 seconds, which						Capacitance change		Within ±10% of the initial capacitance value		
	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.					tan δ			Less than or equal to the initial specified value		
neat						Leakag	Leakage current		Less than or equal to the initial specified value		
Marking Black print on the case top.											
-		•									

## ■Chip Type



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



### **■**Dimensions

		6.3		10		16		25		35		50	
Cap. (µF)	Code	OJ 1A		A	1C		1E		1V		1H		
0.1	0R1											4	1.0
0.22	R22						-		i		İ	4	2.0
0.33	R33		!						!		!	4	2.8
0.47	R47						1					4	4.0
1	010						1		i		İ	4	8.4
2.2	2R2									4	8.4	5	13
3.3	3R3						İ	5	12	5	16	5	17
4.7	4R7					4	12	5	16	5	18	6.3	20
10	100		i	4	17	5	23	6.3	27	6.3	29	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		!		!		Rated
100	101	8	82									Case size	ripple

Rated ripple current (mArms) 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.118) series if high C/V products are reqired.
- Please refer to page 3 for the minimum order quantity.