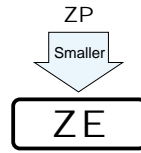


# ALUMINUM ELECTROLYTIC CAPACITORS

**ZE** series 3.95mmL MAX. Chip Type, Bi-polarized



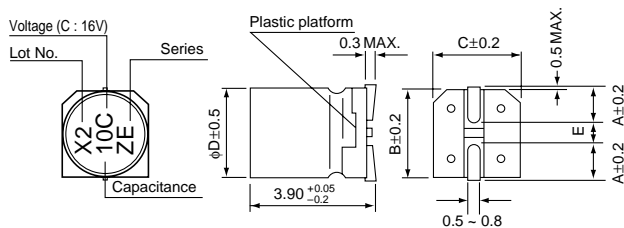
- Chip type with 3.95mmL MAX. height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2002/95/EC).



## Specifications

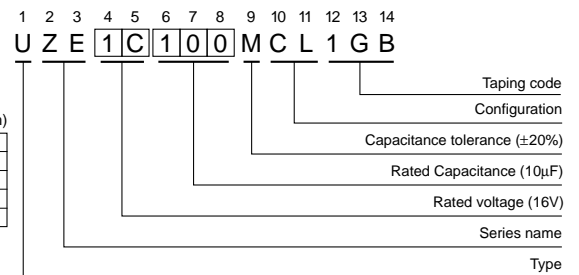
Item	Performance Characteristics																								
Category Temperature Range	-40 ~ +85°C																								
Rated Voltage Range	6.3 ~ 50V																								
Rated Capacitance Range	0.1 ~ 47μF																								
Capacitance Tolerance	±20% at 120Hz, 20°C																								
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.05 CV or 10 (μA) , whichever is greater.																								
tan δ	Measurement frequency : 120Hz, Temperature : 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																		
Endurance	After 1000 hours' application of rated voltage at 85°C with the polarity inverted every 250 hours, capacitors meet the characteristic requirements listed at right.		<table border="1"> <tr> <td>Capacitance change</td> <td colspan="5">Within ±30% of initial value</td> </tr> <tr> <td>tan δ</td> <td colspan="5">300% or less of initial specified value</td> </tr> <tr> <td>Leakage current</td> <td colspan="5">Initial specified value or less</td> </tr> </table>					Capacitance change	Within ±30% of initial value					tan δ	300% or less of initial specified value					Leakage current	Initial specified value or less				
	Capacitance change	Within ±30% of initial value																							
tan δ	300% or less of initial specified value																								
Leakage current	Initial specified value or less																								
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.																								
Resistance to soldering heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristic requirements listed at right.		<table border="1"> <tr> <td>Capacitance change</td> <td colspan="5">Within ±10% of initial value</td> </tr> <tr> <td>tan δ</td> <td colspan="5">Initial specified value or less</td> </tr> <tr> <td>Leakage current</td> <td colspan="5">Initial specified value or less</td> </tr> </table>					Capacitance change	Within ±10% of initial value					tan δ	Initial specified value or less					Leakage current	Initial specified value or less				
Capacitance change	Within ±10% of initial value																								
tan δ	Initial specified value or less																								
Leakage current	Initial specified value or less																								
Marking	Black print on the case top.																								

## Chip Type



Voltage	6.3	10	16	25	35	50
Code	j	A	C	E	V	H

## Type numbering system (Example : 16V 10μF)



## Dimensions

Cap. (μF)	Code	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	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						
33	330	6.3	37	6.3	41	6.3	49						
47	470	6.3	45										

Rated Ripple (mArms) at 85°C 120Hz

## Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz~
Coefficient	0.70	1.00	1.17	1.36	1.50

- Taping specifications are given in page 24.
- Recommended land size are given in page 25.
- Please contact us for the soldering by reflow.
- Please refer to page 3 for the minimum order quantity.