

# ALUMINUM ELECTROLYTIC CAPACITORS

# UZG

3.95mmL MAX. Chip Type,  
Wide Temperature Range



For SMD

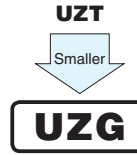


Smaller



Anti-Solvent  
Feature

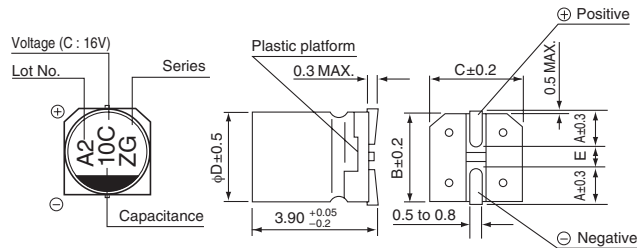
- Chip type with 3.95mmLMAX height. Operating over wide temperature range of  $-40$  to  $+105^{\circ}\text{C}$ .
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



## Specifications

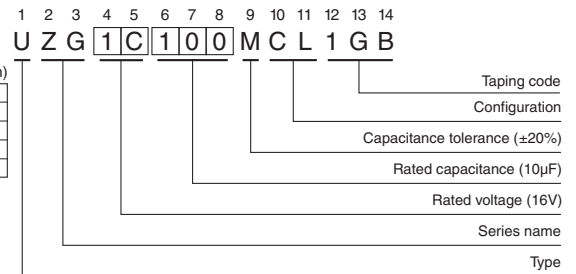
Item	Performance Characteristics								
Category Temperature Range	$-40$ to $+105^{\circ}\text{C}$								
Rated Voltage Range	6.3 to 50V								
Rated Capacitance Range	1 to $100\mu\text{F}$								
Capacitance Tolerance	$\pm 20\%$ at 120Hz, $20^{\circ}\text{C}$								
Leakage Current	After 2 minutes' application of rated voltage at $20^{\circ}\text{C}$ , leakage current is not more than 0.01 CV or 3 ( $\mu\text{A}$ ), whichever is greater.								
Tangent of loss angle (tan $\delta$ )	Rated voltage (V)	6.3	10	16	25	35	50	120Hz $20^{\circ}\text{C}$	
	tan $\delta$ (MAX.)	0.38	0.32	0.20	0.16	0.14	0.14		
Stability at Low Temperature	Rated voltage (V)	6.3	10	16	25	35	50	120Hz	
	Impedance ratio ZT / Z20 (MAX.)	Z- $25^{\circ}\text{C}$ / Z+ $20^{\circ}\text{C}$	6	5	3	3	3		3
		Z- $40^{\circ}\text{C}$ / Z+ $20^{\circ}\text{C}$	10	10	6	6	4		4
Endurance	The specifications listed at right shall be met when the capacitors are restored to $20^{\circ}\text{C}$ after the rated voltage is applied for 1000 hours at $105^{\circ}\text{C}$ .							Capacitance change	Within $\pm 30\%$ of the initial capacitance value
								tan $\delta$	300% 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 $105^{\circ}\text{C}$ for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at $20^{\circ}\text{C}$ , 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 $250^{\circ}\text{C}$ . The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to $20^{\circ}\text{C}$ .							Capacitance change	Within $\pm 10\%$ of the initial capacitance value
								tan $\delta$	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		6.3	10	16	25	35	50
V		6.3	10	16	25	35	50
Code		j	A	C	E	V	H

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



## 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

● Dimension table in next page.

UZG

## ■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance ( $\mu$ F)	Case Size $\phi$ D $\times$ L (mm)	$\tan \delta$	Leakage Current ( $\mu$ A) (at 20°C after 2 minutes)	Rated Ripple (mArms) (105°C/120Hz)	Part Number
6.3 (0J)	22	4 $\times$ 3.9	0.38	3	19	UZG0J220MCL1GB
	33	5 $\times$ 3.9	0.38	3	26	UZG0J330MCL1GB
	47	5 $\times$ 3.9	0.38	3	32	UZG0J470MCL1GB
	100	6.3 $\times$ 3.9	0.38	6.3	52	UZG0J101MCL1GB
10 (1A)	22	5 $\times$ 3.9	0.32	3	24	UZG1A220MCL1GB
	33	5 $\times$ 3.9	0.32	3.3	30	UZG1A330MCL1GB
	47	6.3 $\times$ 3.9	0.32	4.7	40	UZG1A470MCL1GB
16 (1C)	10	4 $\times$ 3.9	0.20	3	16	UZG1C100MCL1GB
	22	5 $\times$ 3.9	0.20	3.52	26	UZG1C220MCL1GB
	33	6.3 $\times$ 3.9	0.20	5.28	35	UZG1C330MCL1GB
	47	6.3 $\times$ 3.9	0.20	7.52	44	UZG1C470MCL1GB
25 (1E)	4.7	4 $\times$ 3.9	0.16	3	11	UZG1E4R7MCL1GB
	10	5 $\times$ 3.9	0.16	3	20	UZG1E100MCL1GB
	22	6.3 $\times$ 3.9	0.16	5.5	33	UZG1E220MCL1GB
	33	6.3 $\times$ 3.9	0.16	8.25	42	UZG1E330MCL1GB
35 (1V)	4.7	4 $\times$ 3.9	0.14	3	13	UZG1V4R7MCL1GB
	10	5 $\times$ 3.9	0.14	3.5	22	UZG1V100MCL1GB
	22	6.3 $\times$ 3.9	0.14	7.7	36	UZG1V220MCL1GB
50 (1H)	1	4 $\times$ 3.9	0.14	3	5.4	UZG1H010MCL1GB
	2.2	4 $\times$ 3.9	0.14	3	9.6	UZG1H2R2MCL1GB
	3.3	4 $\times$ 3.9	0.14	3	12	UZG1H3R3MCL1GB
	4.7	5 $\times$ 3.9	0.14	3	16	UZG1H4R7MCL1GB
	10	6.3 $\times$ 3.9	0.14	5	26	UZG1H100MCL1GB

- Taping specifications are given in page 20.
- Recommended land size, soldering by reflow are given in page 16,17.
- Please refer to page 3 for the minimum order quantity.