

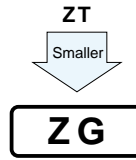
# ALUMINUM ELECTROLYTIC CAPACITORS



**ZG** 3.95mmL MAX. Chip Type,  
Wide Temperature Range  
series



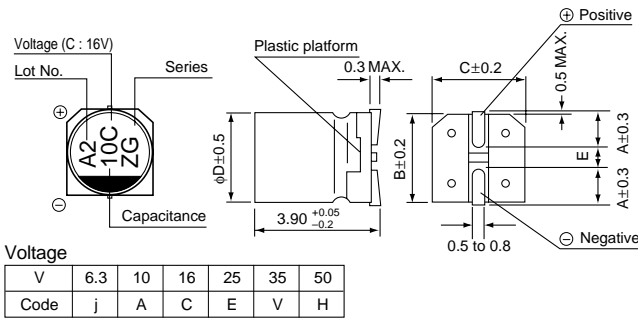
- Chip type with 3.95mmLMAX height. Operating over wide temperature range of -40 to +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2002/95/EC).



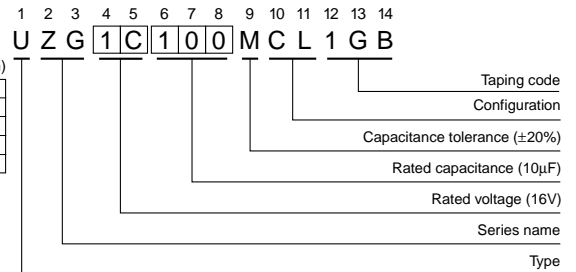
## Specifications

Item	Performance Characteristics									
Category Temperature Range	-40 to +105°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 0.01 CV or 3 (μA) , whichever is greater.									
Tangent of loss angle (tan δ)	Rated voltage (V)	6.3	10	16	25	35	50	120Hz 20°C		
	tan δ (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°C / Z+20°C	6	5	3	3	3		3	
		Z-40°C / Z+20°C	10	10	6	6	4		4	
Endurance	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 105°C.						Capacitance change	tan δ	Leakage current	Within ±30% of the initial capacitance value 300% or less than the initial specified value Less than or equal to the initial specified 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.									
Resistance to soldering heat	The capacitors are kept on a hot plate for 30 seconds, which 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.						Capacitance change	tan δ	Leakage current	Within ±10% of the initial capacitance value Less than or equal to the initial specified value Less than or equal to the initial specified value
Marking	Black print on the case top.									

## Chip Type



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



## Dimensions

Cap. (μF)	V		6.3		10		16		25		35		50	
	Code		0J		1A		1C		1E		1V		1H	
0.1	0R1												4	0.9
0.22	R22												4	2.2
0.33	R33												4	2.8
0.47	R47												4	3.3
1	010												4	5.4
2.2	2R2												4	9.6
3.3	3R3												4	12
4.7	4R7								4	11	4	13	5	16
10	100						4	16	5	20	5	22	6.3	26
22	220	4	19	5	24	5	26	6.3	33	6.3	36			
33	330	5	26	5	30	6.3	35	6.3	42					
47	470	5	32	6.3	40	6.3	44							
100	101	6.3	52											

Rated ripple current (mArms) at 105°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 refer to page 3 for the minimum order quantity.

CAT.8100B