

ZG3.95mmL MAX. Chip Type,
Wide Temperature Range
series

For SMD



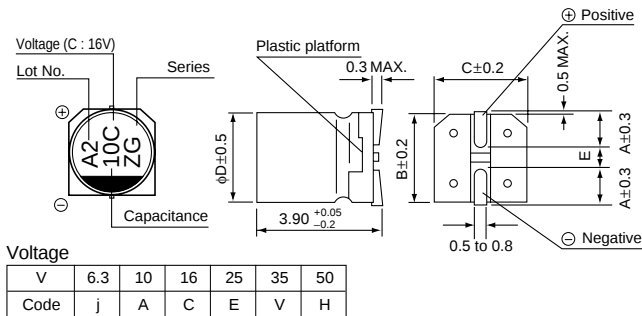
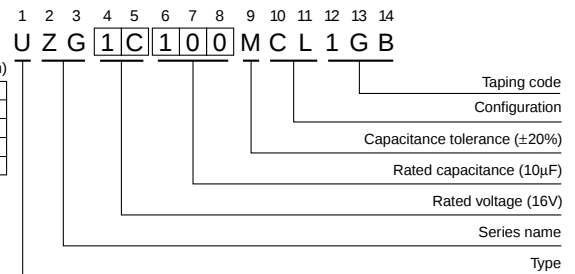
Smaller

Anti-Solvent
Feature

- 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 (2011/65/EU).

**ZG****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		Within ±30% of the initial capacitance value	
						tan δ		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°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		Within ±10% of the initial capacitance value	
						tan δ		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**Type numbering system (Example : 16V 10μF)****Dimensions**

V		6.3		10		16		25		35		50	
Cap. (μF)	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 (mA rms) 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.