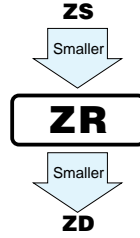


ALUMINUM ELECTROLYTIC CAPACITORS

ZR series 3.95mmL MAX. Chip Type



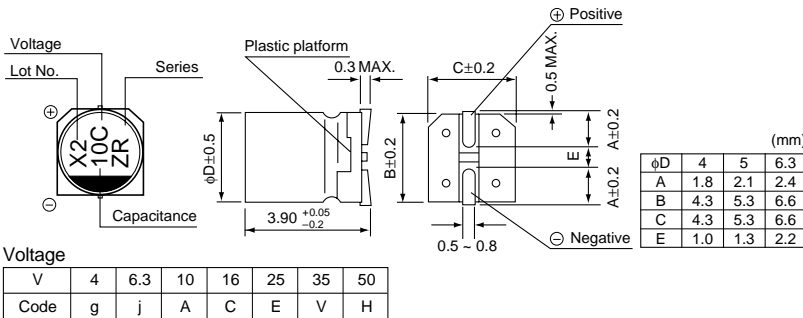
- Chip type with 3.95mmLMAX height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.



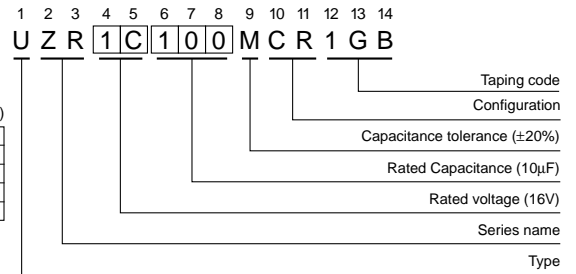
Specifications

Item	Performance Characteristics												
Category Temperature Range	-40 ~ +85°C												
Rated Voltage Range	4 ~ 50V												
Rated Capacitance Range	0.1 ~ 220μF												
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.												
tan δ	Rated voltage (V)	4	6.3	10	16	25	35	50	120Hz 20°C				
	tan δ (MAX.)	0.50	0.30	0.24	0.19	0.16	0.14	0.14					
Stability at Low Temperature	Rated voltage (V)	4	6.3	10	16	25	35	50	120Hz				
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	7	4	3	2	2	2			2		
		Z-40°C / Z+20°C	15	8	8	4	4	3			3		
Endurance	After 1000 hours' application of rated voltage at 85°C, capacitors meet the characteristic requirements listed at right.										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 leaving capacitors under no load at 85°C for 1000 hours, they 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.										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



Type numbering system (Example : 16V 10μF)



Dimensions

Cap. (μF)	V		4		6.3		10		16		25		35		50	
	Code		0G	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	13
3.3	3R3														4	17
4.7	4R7														4	20
10	100								4	23	5	27	5	29	6.3	33
22	220			4	28	5	33	5	37	6.3	42	6.3	46			
33	330	4	28	5	37	5	41	6.3	49	6.3	52					
47	470	4	33	5	45	6.3	52	6.3	58							
100	101	5	56	6.3	70											
220	221	6.3	96													

Rated Ripple (mA rms) 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 22.
- Recommended land size are given in page 23
- Please refer to page 3 for the minimum order quantity.