

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## ALUMINUM ELECTROLYTIC CAPACITORS

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 fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).

Values marked with an \* in the dimension table are scheduled to be discontinued and are not recommended for new designs.



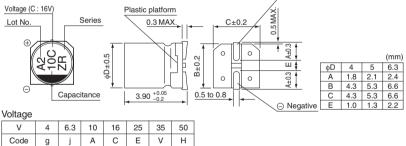


### ■Specifications

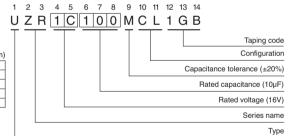
Item	Performance Characteristics									
Category Temperature Range	-40 to +85°C									
Rated Voltage Range	4 to 50V									
Rated Capacitance Range	0.1 to 220µF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Leakage Current	After 2 minutes' application of rated voltage. leakage current is not more than 0.01 CV or 3 (µA), whichever is greater.									
	Rated voltage (V)		4	6.3	10	16	25	35	50	120Hz 20°C
Tangent of loss angle (tan $\delta$ )	tan δ (MAX.)		0.50	0.30	0.24	0.19	0.16	0.14	0.14	
	Rated voltage (V)		4	6.3	10	16	25	35	50	120Hz
Stability at Low	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	7	4	3	2	2	2	2	
Temperature		Z-40°C / Z+20°C	15	8	8	4	4	3	3	
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 85°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									ial specified value
Shelf Life	After storing the capacitors under no load at 85°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 specified tan δ Less than or equal to the initial specified Leakage current Less than or equal to the initial specified							I to the initial specified value		
Marking	Black print on the case top.									

⊕ Positive

### ■Chip Type



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



#### Dimensions

	V	4	1	6.	.3	1	0	1	6	2	25	3	5	5	0
Cap. (µF)	Code	0	G	0	J	1	Α	1	С	1	E	1	V	11	Н
0.1	0R1													<b>%4</b>	1.0
0.22	R22		İ				i		İ		i		i	<b>%4</b>	2.0
0.33	R33		l I				l I		-		-		I I	*4	2.8
0.47	R47		! !										!	*4	4.0
1	010		İ										İ	4	8.4
2.2	2R2		l I				I I		1		I I		I I	4	13
3.3	3R3													4	17
4.7	4R7		i I				i			4	16	4	18	5	20
10	100		I I				l I	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		i		
47	470	4	33	5	45	6.3	52	6.3	58		I I		I I		
100	101	5	56	6.3	70								!		
220	221	6.3	96										i	Case size φD (mm)	Rated ripple

Rated ripple current (mArms) at 85°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.