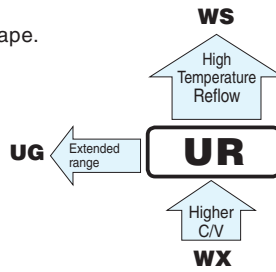


# ALUMINUM ELECTROLYTIC CAPACITORS

**UR** series Chip Type, High CV



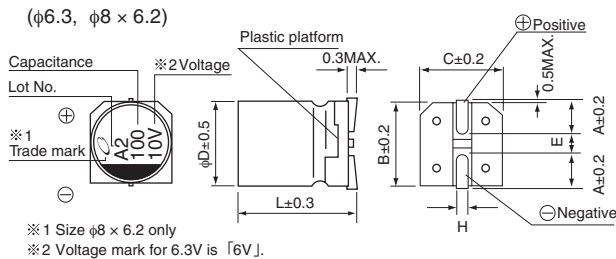
- Chip type, higher capacitance in larger case sizes.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).



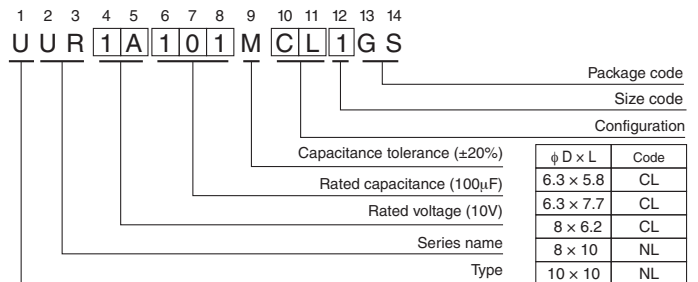
## Specifications

Item	Performance Characteristics									
Category Temperature Range	-40 to +85°C									
Rated Voltage Range	4 to 100V									
Rated Capacitance Range	3.3 to 1500μF									
Capacitance Tolerance	±20% at 120Hz, 20°C									
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV (μA).									
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C									
	Rated voltage (V)	4	6.3	10	16	25	35	50	63	100
Stability at Low Temperature	Measurement frequency: 120Hz									
	Rated voltage (V)	4	6.3	10	16	25	35	50	63	100
	Impedance ratio Z <sub>-25°C</sub> / Z <sub>+20°C</sub>	7	5	4	3	2	2	2	2	2
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 85°C.									
	Capacitance change	Within ±20% of the initial capacitance 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.									
	Capacitance change	Within ±10% of the initial capacitance value								
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.									
	tan δ	Less than or equal to the initial specified value								
Marking	Black print on the case top.									
	Leakage current	Less than or equal to the initial specified value								

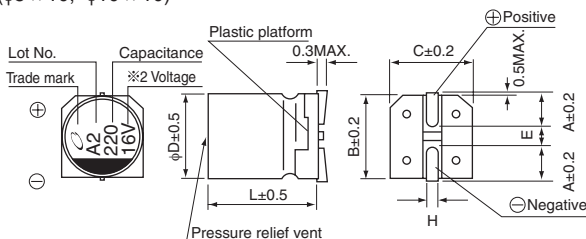
## Chip Type



## Type numbering system (Example : 10V 100μF)



(φ8 × 10, φ10 × 10)



	(mm)				
φ D × L	6.3 × 5.8	6.3 × 7.7	8 × 6.2	8 × 10	10 × 10
A	2.4	2.4	3.3	2.9	3.2
B	6.6	6.6	8.3	8.3	10.3
C	6.6	6.6	8.3	8.3	10.3
E	2.2	2.2	2.3	3.1	4.5
L	5.8	7.7	6.2	10	10
H	0.5 to 0.8	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1

● Dimension table in next page.



## ■ Dimensions

Cap.( $\mu$ F)	Code	V										Case size $\phi$ D $\times$ L (mm)	Rated ripple					
		4 0G	6.3 0J	10 1A	16 1C	25 1E	35 1V	50 1H	63 1J	100 2A								
3.3	3R3												6.3x5.8	29				
4.7	4R7												6.3x5.8	31	● 8x6.2	40 (35)		
10	100												8x6.2	46	8x10	77		
22	220												6.3x5.8	45	8x10	96	8x10	100
33	330									6.3x5.8	55	○ 8x6.2	95 (94)	8x10	117	10x10	130	
47	470								6.3x5.8	65	● 8x6.2	105 (94)	○ 8x10	140 (105)	8x10	140	10x10	155
100	101				6.3x5.8	70	8x6.2	125	○ 8x6.2	145 (143)	○ 8x10	175 (132)	■ 10x10	195 (181)	10x10	232		
150	151				6.3x5.8	85	6.3x7.7	151	8x10	192	8x10	214	10x10	238				
220	221				● 8x6.2	160 (143)	○ 8x6.2	175 (173)	○ 8x10	215 (162)	■ 10x10	250 (232)	■ 10x10	265 (246)	10x10	289		
330	331	6.3x5.8	152	○ 8x6.2	190 (188)	8x10	240	8x10	270	■ 10x10	305 (284)	10x10	324					
470	471	6.3x7.7	200	8x10	265	8x10	290	■ 10x10	330 (307)	10x10	393							
680	681	8x10	284	8x10	318	10x10	374	10x10	396									
1000	102	8x10	344	■ 10x10	400 (372)	10x10	454											
1500	152	10x10	347	10x10	489													

Size  $\phi$ 6.3  $\times$  5.8 is available for capacitors marked. "●"

Size  $\phi$ 6.3  $\times$  7.7 is available for capacitors marked. "○"

Size  $\phi$ 8  $\times$  10 is available for capacitors marked. "■"

※ In this case, ( ) will be put at 12th digit of type numbering system.

Rated ripple current (mArms) at 85°C 120Hz

## ● Frequency coefficient of rated ripple current

Cap.( $\mu$ F)	Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Less than 47		0.80	1.00	1.15	1.40	1.67
100 to 1500		0.85	1.00	1.08	1.20	1.30

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18, 19.
- Please select UG(p.158) series if high CV products are required.
- Please refer to page 3 for the minimum order quantity.