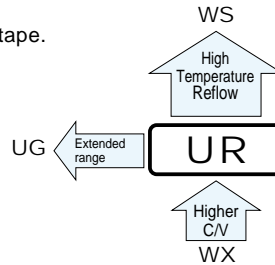


**UR** series Chip Type, High CV



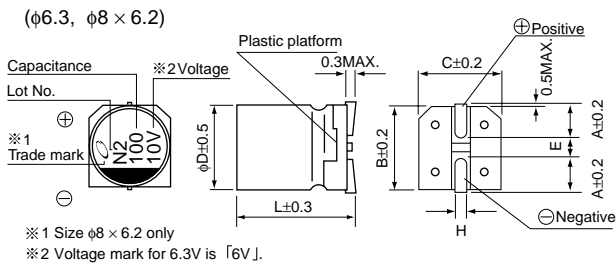
- Chip type, higher capacitance in larger case sizes.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2002/95/EC).



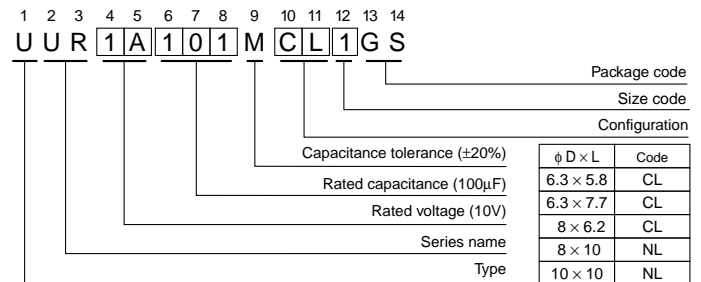
## Specifications

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, Temperature : 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-25°C / Z+20°C	7	5	4	3	2	2	2	2	2	
Endurance	ZT / Z20 (MAX.)		Z-40°C / Z+20°C	15	10	8	6	4	3	3	3	
	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.		tan δ		200% or less than the initial specified value							
	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.		Leakage current		Less than or equal to the initial specified 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.		Capacitance change		Within ±10% of the initial capacitance value							
	Marking		tan δ		Less than or equal to the initial specified value							
		Leakage current		Less than or equal to the initial specified value								

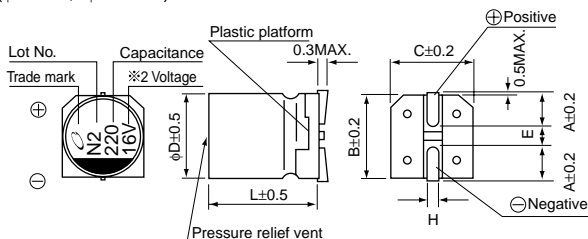
## Chip Type



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



(φ8 × 10, φ10 × 10)



φD × 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.

## UR series

### ■ Dimensions

Cap.(μF)	V	Code										Case size φD × 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												6.3×5.8	29			
4.7	4R7												6.3×5.8	31	● 8×6.2	40 (35)	
10	100												8×6.2	46	8×10	77	
22	220											6.3×5.8	45	8×10	96	8×10	100
33	330									6.3×5.8	55	○ 8×6.2	95 (94)	8×10	117	10×10	130
47	470							6.3×5.8	65	● 8×6.2	105 (94)	○ 8×10	140 (105)	8×10	140	10×10	155
100	101			6.3×5.8	70	8×6.2	125	○ 8×6.2	145 (143)	○ 8×10	175 (132)	■ 10×10	195 (181)	10×10	232		
150	151			6.3×5.8	85	6.3×7.7	151	8×10	192	8×10	214	10×10	238				
220	221			● 8×6.2	160 (143)	○ 8×6.2	175 (173)	○ 8×10	215 (162)	■ 10×10	250 (232)	■ 10×10	265 (246)	10×10	289		
330	331	6.3×5.8	152	○ 8×6.2	190 (188)	8×10	240	8×10	270	■ 10×10	305 (284)	10×10	324				
470	471	6.3×7.7	200	8×10	265	8×10	290	■ 10×10	330 (307)	10×10	393						
680	681	8×10	284	8×10	318	10×10	374	10×10	396								
1000	102	8×10	344	■ 10×10	400 (372)	10×10	454										
1500	152	10×10	347	10×10	489												

Size φ6.3 × 5.8 is available for capacitors marked. "●"

Size φ6.3 × 7.7 is available for capacitors marked. "○"

Size φ8 × 10 is available for capacitors marked. "■"

※ In this case, [6] 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.(μF)	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.106) series if high CV products are required.
- Please refer to page 3 for the minimum order quantity.