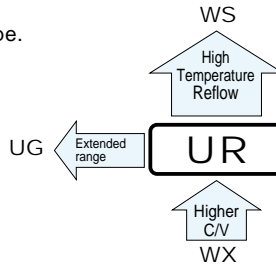


## UR series Chip Type, High CV



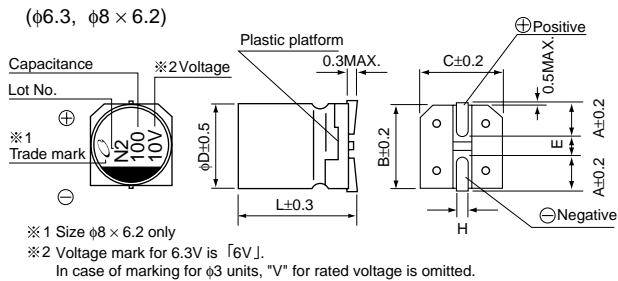
- Chip type, higher capacitance in larger case sizes.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2002/95/EC).



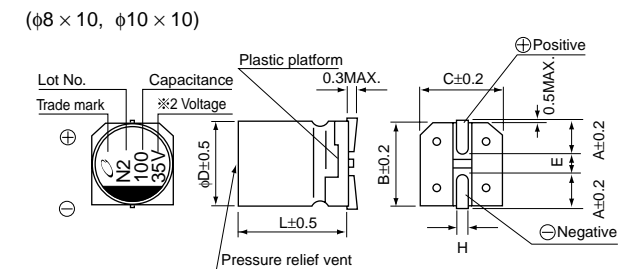
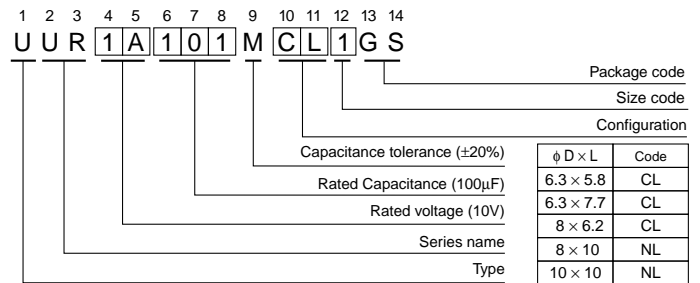
### Specifications

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).									
tan δ	Measurement frequency : 120Hz, Temperature : 20°C									
	Rated voltage (V)	4	6.3	10	16	25	35	50	63	100
	tan δ (MAX.)	0.35	0.28	0.24	0.20	0.16	0.14	0.12	0.12	0.12
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
	ZT / Z20 (MAX.)	15	10	8	6	4	3	3	3	3
Endurance	After 2000 hours' application of rated voltage at 85°C, capacitors meet the characteristic requirements listed at right.					Capacitance change		Within ±20% of initial value		
						tan δ		200% or less of initial specified value		
						Leakage current		Initial specified value or less		
Shelf Life						After storing the capacitors under no load at 85°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will 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 : 10V 100μF)



	(mm)				
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

### ■ Dimensions

Cap.(μF)	Code	V													
		4	6.3	10	16	25	35	50	63	100					
		0G	0J	1A	1C	1E	1V	1H	1J	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							Case size φD × L (mm)	Rated ripple
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, [ ] will be put at 12th digit of type numbering system.

Rated Ripple (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.91) series if high CV products are required.
- Please refer to page 3 for the minimum order quantity.