

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 (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 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-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							
	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		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)



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)	Code	V										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.114) series if high CV products are required.
- Please refer to page 3 for the minimum order quantity.