

ALUMINUM ELECTROLYTIC CAPACITORS



Chip Type, For Audio Equipment
Wide Temperature Range



- Chip type acoustic series within the wide temperature range.
- 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.

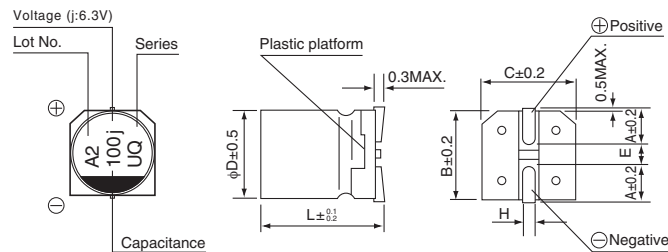


Specifications

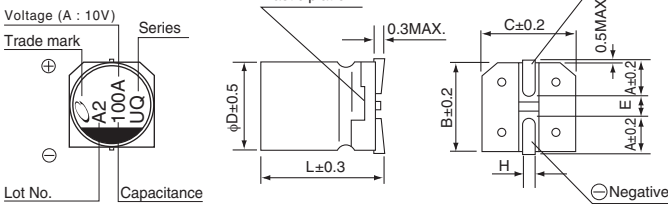
Item	Performance Characteristics								
Category Temperature Range	-40 to +105°C								
Rated Voltage Range	6.3 to 50V								
Rated Capacitance Range	0.1 to 1000μF								
Capacitance Tolerance	±20% (120Hz, 20°C)								
Leakage Current	After 1 minute's application of rated voltage at 20°C, leakage current is not more than 0.03 CV or 4 (μA), whichever is greater.								
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C								
	Rated voltage (V)	6.3	10	16	25	35	50		
Stability at Low Temperature	Measurement frequency : 120Hz								
	Impedance ratio ZT / Z20 (MAX.)	Rated voltage (V)		6.3	10	16	25	35	50
		Z-25°C / Z+20°C	4	3	2	2	2	2	
Z-40°C / Z+20°C	8	5	4	3	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 105°C.		Capacitance change		Within ±20% of the initial capacitance value				
			tan δ		200% or less than the initial specified value				
Shelf Life	After storing the capacitors under no load at 105°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.		Leakage current		Less than or equal to the initial specified value				
			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				
			Leakage current		Less than or equal to the initial specified value				
Marking	Black print on the case top.								

Chip Type

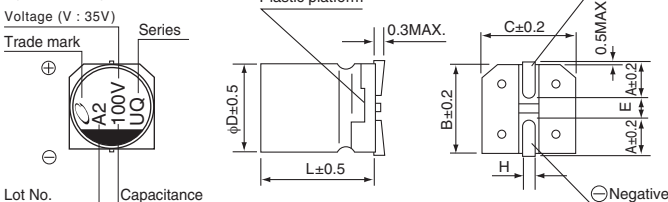
(φ4 to φ6.3)



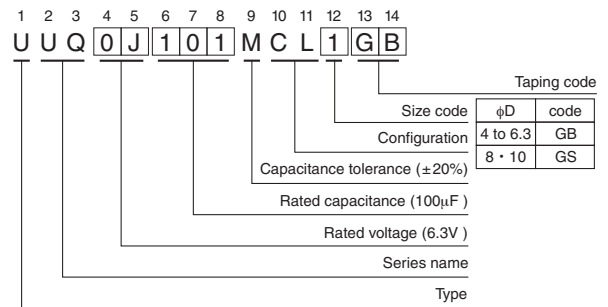
(φ8 × 6.2L)



(φ8 × 10L, φ10)



Type numbering system (Example : 6.3V 100μF)



φD × L	4 × 5.4	5 × 5.4	6.3 × 5.4	8 × 6.2	8 × 10	10 × 10
A	1.8	2.1	2.4	3.3	2.9	3.2
B	4.3	5.3	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	8.3	8.3	10.3
E	1.0	1.3	2.2	2.3	3.1	4.5
L	5.4	5.4	5.4	6.2	10	10
H	0.5 to 0.8	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

Rated voltage

V	6.3	10	16	25	35	50
Code	j	A	C	E	V	H

● Dimension table in next page.



■ Dimensions

Cap.(μ F)	Code	6.3		10		16		25		35		50	
		0J		1A		1C		1E		1V		1H	
0.1	0R1											※ 4 × 5.4	1.0
0.22	R22											※ 4 × 5.4	2.6
0.33	R33											※ 4 × 5.4	3.2
0.47	R47											※ 4 × 5.4	3.8
1	010											4 × 5.4	6.2
2.2	2R2											4 × 5.4	11
3.3	3R3											4 × 5.4	14
4.7	4R7							4 × 5.4	13	4 × 5.4	15	5 × 5.4	19
10	100			4 × 5.4	22	4 × 5.4	18	5 × 5.4	23	5 × 5.4	25	6.3 × 5.4	30
22	220	4 × 5.4	22	5 × 5.4	27	5 × 5.4	30	6.3 × 5.4	38	6.3 × 5.4	42	8 × 6.2	51
33	330	5 × 5.4	30	5 × 5.4	35	6.3 × 5.4	40	6.3 × 5.4	48	8 × 6.2	59	8 × 10	140
47	470	5 × 5.4	36	6.3 × 5.4	46	6.3 × 5.4	50	8 × 6.2	66	8 × 10	155	8 × 10	180
100	101	6.3 × 5.4	60	○ 6.3 × 5.4	60 (90)	● 8 × 6.2	102 (210)	8 × 10	155	10 × 10	300	10 × 10	220
220	221	● 8 × 6.2	102 (210)	● 8 × 6.2	102 (210)	△ 8 × 10	210 (310)	10 × 10	300	10 × 10	300		
330	331	● 8 × 6.2	102 (210)	△ 8 × 10	210 (310)	△ 8 × 10	210 (310)						
470	471	△ 8 × 10	210 (310)	△ 8 × 10	210 (310)	△ 8 × 10	210 (310)						
1000	102	10 × 10	310									Case size ϕ D × L (mm)	Rated ripple

Size ϕ 8 × 6.2L is available for capacitors marked "○".

Size ϕ 8 × 10L is available for capacitors marked "●".

Size ϕ 10 × 10L is available for capacitors marked "△".

※ In this case, [6] will be put at 12th digit of type numbering system.

Rated ripple current (mArms) at 105°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.