

ALUMINUM ELECTROLYTIC CAPACITORS



Chip Type, High Reliability.
Low temperature ESR specification.
series



For SMD



Long Life



Anti-Solvent Feature

- Chip type, high temperature range, for +125°C use.
- Added ESR specification after the test at -40°C (φ6.3 sizes provide only for the first stage.)
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2002/95/EC).



Added ESR specification at -40°C UB

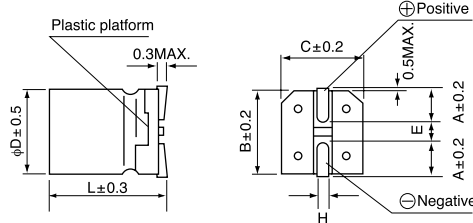
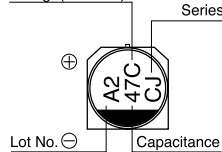


Specifications

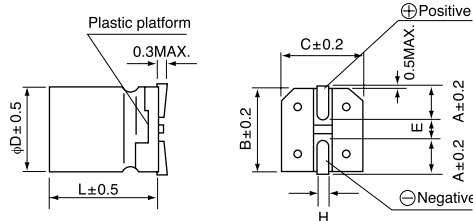
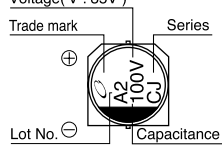
Item	Performance Characteristics					
Category Temperature Range	-40 ~ +125°C					
Rated Voltage Range	10 ~ 50V					
Rated Capacitance Range	10 ~ 470μF					
Capacitance Tolerance	±20% at 120Hz, 20°C					
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4(μA), whichever is greater.					
tan δ	Measurement frequency : 120Hz, Temperature : 20°C					
	Rated voltage (V)	10	16	25	35	50
	tan δ (MAX.)	0.32	0.24	0.21	0.18	0.18
Stability at Low Temperature	Measurement frequency : 120Hz					
	Rated voltage (V)	10	16	25	35	50
	Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C	12	8	6	4
Endurance	After 2000 hours' application of rated voltage at 125°C, capacitors meet the characteristic requirements listed at right.					
	Capacitance change	Within ±30% of initial value				
	tan δ	300% or less of initial specified value				
	Leakage current	Initial specified value or less				
Shelf Life	After storing the capacitors under no load at 125°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

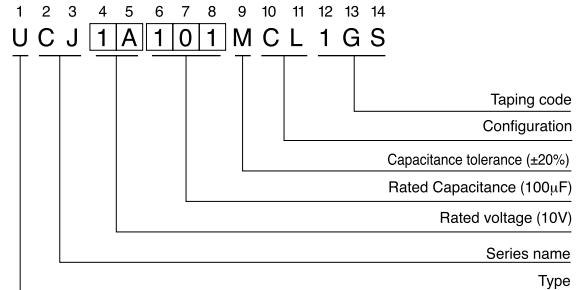
(φ6.3 × 8.7)
Voltage (C : 16V)



(φ8 × 10, φ10 × 10)
Voltage (V : 35V)



Type numbering system (Example : 10V 100μF)



	(mm)		
φD×L	6.3×8.7	8×10	10×10
A	2.4	2.9	3.2
B	6.6	8.3	10.3
C	6.6	8.3	10.3
E	2.2	3.1	4.5
L	8.7	10	10
H	0.5~0.8	0.8~1.1	0.8~1.1

Dimensions

Cap. (μF)	Code	V			10			16			25			35			50				
		10	16	25	1A	1C	1E	1V	1H												
10	100																				
22	220																				
33	330																				
47	470																				
100	101	6.3×8.7	14	-	95	8×10	2.0	6.0	250	8×10	2.0	6.0	250	10×10	1.5	4.5	400	10×10	1.5	4.5	400
220	221	8×10	2.0	6.0	250	10×10	1.5	4.5	400	10×10	1.5	4.5	400	10×10	1.5	4.5	400	10×10	1.5	4.5	400
330	331	10×10	1.5	4.5	400	10×10	1.5	4.5	400	10×10	1.5	4.5	400	10×10	1.5	4.5	400	10×10	1.5	4.5	400
470	471	10×10	1.5	4.5	400	10×10	1.5	4.5	400	10×10	1.5	4.5	400	10×10	1.5	4.5	400	10×10	1.5	4.5	400

Max. ESR (Ω) at -40°C 100kHz, Rated Ripple (mArms) at 125°C 100kHz

Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz~
Coefficient	0.35	0.50	0.64	0.83	1.00

- Taping specifications are given in page 24.
- Recommended land size, soldering by reflow are given in page 25, 26.
- Please refer to page 3 for the minimum order quantity.

CAT.8100V-2