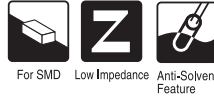


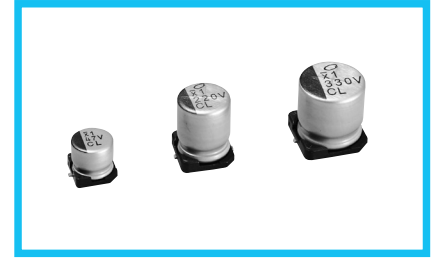
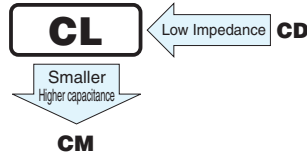
ALUMINUM ELECTROLYTIC CAPACITORS



Chip Type, Low Impedance series



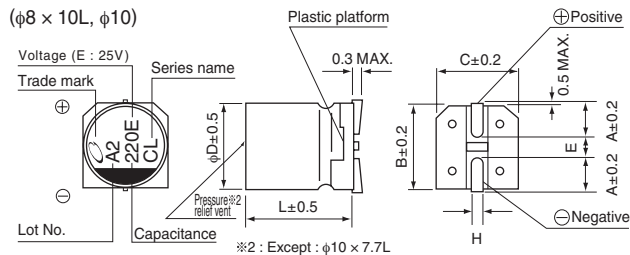
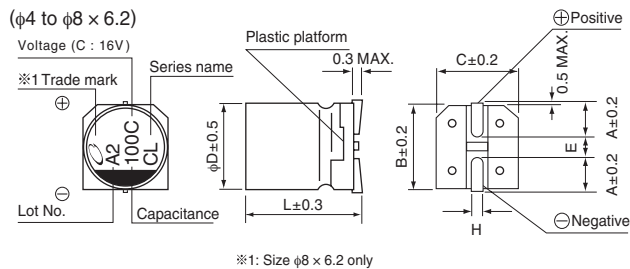
- Chip type, low impedance, temperature range up to +105°C.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU).



Specifications

Item	Performance Characteristics							
Category Temperature Range	- 55 to +105°C							
Rated Voltage Range	6.3 to 50V							
Rated Capacitance Range	10 to 2200μF							
Capacitance Tolerance	± 20% at 120Hz, 20°C							
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01 CV or 3 (μA), whichever is greater.							
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C							
	Rated voltage (V) tan δ (MAX.)	6.3 0.26	10 0.19	16 0.16	25 0.14	35 0.12	50 0.10	
Stability at Low Temperature	Measurement frequency : 120Hz							
	Rated voltage (V)	6.3	10	16	25	35	50	
	Impedance ratio ZT / Z20 (MAX.)	Z—25°C / Z+20°C	2	2	2	2	2	2
		Z—40°C / Z+20°C	3	3	3	3	3	3
Z—55°C / Z+20°C	4	4	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 2000 hours at 105°C.		Capacitance Change		Within ± 30% 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			
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			
			tan δ		Less than or equal to the initial specified value			
Marking			Leakage current		Less than or equal to the initial specified value			
	Black print on the case top.							

Chip Type

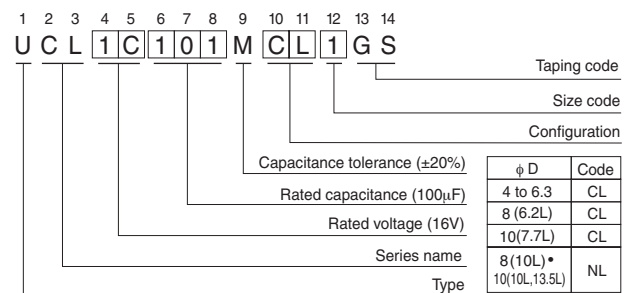


Voltage

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

• Dimension table in next page.

Type numbering system (Example : 16V 100μF)



	(mm)								
φD × L	4 × 5.8	5 × 5.8	6.3 × 5.8	6.3 × 7.7	8 × 6.2	8 × 10	10 × 7.7	10 × 10	10 × 13.5
A	1.8	2.1	2.4	2.4	3.3	2.9	3.2	3.2	3.2
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3	10.3	10.3
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3	10.3	10.3
E	1.0	1.3	2.2	2.2	2.3	3.1	4.5	4.5	4.5
L	5.8	5.8	5.8	7.7	6.2	10	7.7	10	13.5
H	0.5 to 0.8	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	0.8 to 1.1	0.8 to 1.1



Specifications

Cap. (μF)	Code	6.3			10			16			25			35			50								
		0J			1A			1C			1E			1V			1H								
10	100							4 × 5.8	0.85	160	4 × 5.8	0.85	160	● 4 × 5.8	0.85	160	5 × 5.8	0.36	240						
22	220	4 × 5.8	0.85	160	4 × 5.8	0.85	160	● 4 × 5.8	0.85	160	5 × 5.8	0.36	240	5 × 5.8	0.36	240	5 × 5.8	0.36	240						
33	330				● 4 × 5.8	0.85	160							● 5 × 5.8	0.36	240	6.3 × 5.8	0.26	300						
47	470	● 4 × 5.8	0.85	160	6.3 × 5.8	0.26	300	● 5 × 5.8	0.36	240	6.3 × 5.8	0.26	300	6.3 × 5.8	0.26	300	6.3 × 5.8	0.26	300						
68	680							6.3 × 5.8	0.26	300	6.3 × 5.8	0.26	300	6.3 × 5.8	0.26	300	6.3 × 7.7	0.16	600						
100	101	● 5 × 5.8	0.36	240	6.3 × 5.8	0.26	300	6.3 × 5.8	0.26	300	6.3 × 7.7	0.16	600	● 6.3 × 7.7	0.16	600	8 × 10	0.08	850	8 × 10	0.18	670			
150	151	6.3 × 5.8	0.26	300	6.3 × 5.8	0.26	300	6.3 × 7.7	0.16	600	8 × 10	0.08	850	● 8 × 6.2	0.18	500	8 × 10	0.08	850						
220	221	6.3 × 5.8	0.26	300	6.3 × 7.7	0.16	600	6.3 × 7.7	0.16	600	8 × 10	0.08	850	● 8 × 6.2	0.18	500	● 8 × 6.2	0.18	500	8 × 10	0.08	850	10 × 10	0.12	900
330	331	6.3 × 7.7	0.16	600	8 × 10	0.08	850	8 × 10	0.08	850	8 × 10	0.08	850	● 8 × 6.2	0.18	500	● 10 × 7.7	0.10	850	● 10 × 7.7	0.10	850			
390	391																8 × 10	0.08	850						
470	471	8 × 10	0.08	850	8 × 10	0.08	850	8 × 10	0.08	850	10 × 10	0.06	1190	● 10 × 7.7	0.10	850	● 10 × 7.7	0.10	850	10 × 10	0.06	1190			
560	561										10 × 10	0.08	850												
680	681				8 × 10	0.08	850	10 × 10	0.06	1190	10 × 13.5	0.06	1190												
820	821							10 × 10	0.08	850															
1000	102	8 × 10	0.08	850	10 × 10	0.06	1190	10 × 13.5	0.06	1190															
1200	122				10 × 10	0.08	850																		
1500	152	10 × 10	0.06	1190	10 × 13.5	0.06	1190																		
1800	182	10 × 10	0.08	850																					
2200	222	10 × 13.5	0.06	1190																					
															Case size	Impedance	Rated ripple								
															φD × L	(mm)									

Max. Impedance (Ω) at 20C 100kHz, Rated ripple current (mA rms) at 105°C 100kHz
 ● : In this case, [6] will be put at 12th digit of type numbering system.

• Frequency coefficient of rated ripple current

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

- 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.