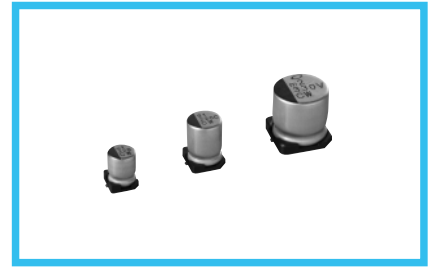
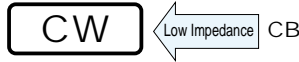


ALUMINUM ELECTROLYTIC CAPACITORS

CW Chip Type, Low Impedance, Long Life Assurance series



- Chip type with load life of 7000 hours at +105°C. 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).

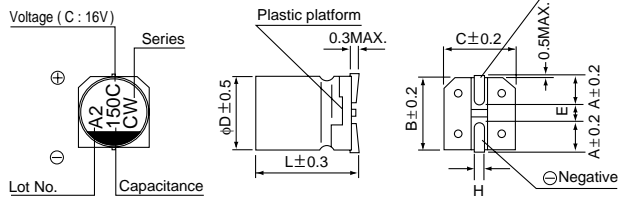


Specifications

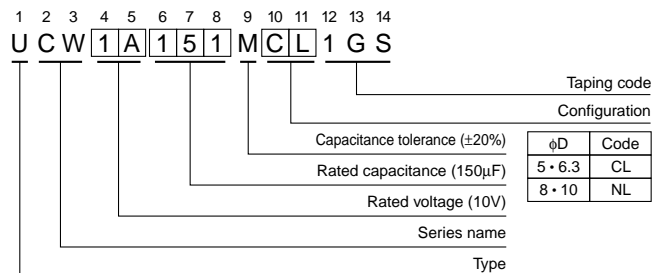
Item	Performance Characteristics												
Category Temperature Range	-25 to +105°C												
Rated Voltage Range	6.3 to 50V												
Rated Capacitance Range	10 to 470µF												
Capacitance Tolerance	±20% at 120Hz, 20°C												
Leakage Current	After 2 minutes' application of rated voltage, 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)	6.3	10	16	25	35	50						
Stability at Low Temperature	Measurement frequency : 120Hz												
	Rated voltage (V)	6.3	10	16	25	35	50						
Endurance	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C	4	3	2	2	2						
	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 7000 hours at 105°C.		<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±30% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>300% or less than the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>					Capacitance change	Within ±30% of the initial capacitance value	tan δ	300% or less than the initial specified value	Leakage current	Less than or equal to the initial specified value
Capacitance change	Within ±30% of the initial capacitance value												
tan δ	300% or less than the initial specified value												
Leakage current	Less than or equal to 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.												
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.		<table border="1"> <tr> <td>Capacitance change</td> <td>Within ±10% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>Less than or equal to the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>					Capacitance change	Within ±10% of the initial capacitance value	tan δ	Less than or equal to the initial specified value	Leakage current	Less than or equal to the initial specified value
	Capacitance change	Within ±10% of the initial capacitance value											
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

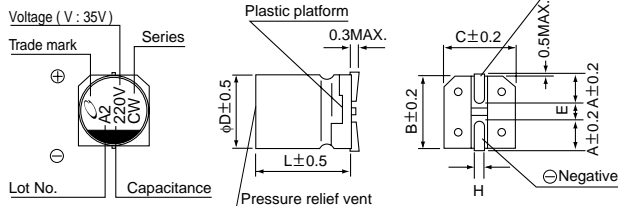
(φ5 to φ6.3)



Type numbering system (Example : 10V 150µF)



(φ8 to φ10)



(mm)

φD × L	5 × 7	6.3 × 7	6.3 × 8.7	8 × 10	10 × 10
A	2.1	2.4	2.4	2.9	3.2
B	5.3	6.6	6.6	8.3	10.3
C	5.3	6.6	6.6	8.3	10.3
E	1.3	2.2	2.2	3.1	4.5
L	7.0	7.0	8.7	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

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)	V	6.3			10			16			25			35			50					
		Code			0J			1A			1C			1E			1V			1H		
10	100																5×7	2.2	95			
22	220							5×7	2.2	95	5×7	2.2	95	5×7	2.2	95						
33	330				5×7	2.2	95				6.3×7	1.1	140	6.3×8.7	1.0	230						
47	470	5×7	2.2	95				6.3×7	1.1	140	6.3×7	1.1	140	6.3×8.7	1.0	230	8×10	0.53	350			
100	101	6.3×7	1.1	140				6.3×7	1.1	140	6.3×8.7	1.0	230				8×10	0.53	350			
150	151				6.3×7	1.1	140	6.3×8.7	1.0	230												
220	221	6.3×8.7	1.0	230				6.3×8.7	1.0	230	8×10	0.22	600	8×10	0.22	600	10×10	0.35	670			
330	331	6.3×8.7	1.0	230				8×10	0.22	600	8×10	0.22	600	10×10	0.16	850						
470	471	8×10	0.22	600				8×10	0.22	600	10×10	0.16	850									

Max. impedance (Ω) at 20°C 100kHz,
 Rated ripple current (mArms) at 105°C 100kHz

● Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz 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.