

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

LV Chip Type, High Voltage.
Long Life.
series



- Chip Type, high voltage and long life.
- Load life of 10000 hours at +105°C
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2011/65/EU).



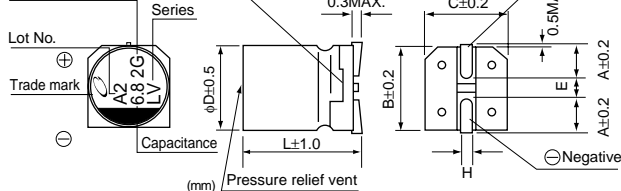
Specifications

Item	Performance Characteristics												
Category Temperature Range	-40 to +105°C												
Rated Voltage Range	160 to 450V												
Rated Capacitance Range	3.3 to 33μF												
Capacitance Tolerance	± 20% at 120Hz, 20°C												
Leakage Current	After 1 minute's application of rated voltage, leakage current is not more than 0.04CV+100 (μA).												
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C												
	Rated voltage (V)	160	200	250	400	450							
	tan δ (MAX.)	0.20	0.20	0.25	0.25	0.30							
Stability at Low Temperature	Measurement frequency: 120Hz												
	Rated voltage (V)		160	200	250	400	450						
	Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C	6	6	10	10	15						
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 10000 hours at 105°C.					<table><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
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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 and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the characteristic requirements listed at right when they are removed from the plate.					<table><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
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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

(φ8 × 10L, φ10)

Voltage(2G : 400V)

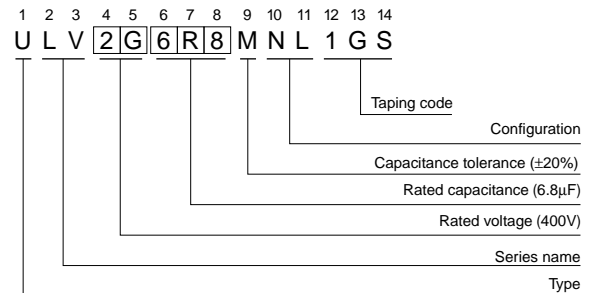


φ × L	8 × 10	10 × 10	10 × 13.5
A	2.9	3.2	3.2
B	8.3	10.3	10.3
C	8.3	10.3	10.3
E	3.1	4.5	4.5
L	10	10	13.5
H	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1

Voltage

V	160	200	250	400	450
Code	2C	2D	2E	2G	2W

Type numbering system (Example : 400V 6.8μF)



Dimensions

Cap.(μF)	V	160		200		250		400		450	
	Code	2C		2D		2E		2G		2W	
3.3	3R3									8×10	25
3.9	3R9							8×10	35		
5.6	5R6									10×10	40
6.8	6R8							10×10	50		
7.5	7R5									10×13.5	45
8.2	8R2					8×10	35				
10	100							10×13.5	55		
12	120			8×10	50						
15	150	8×10	50			10×10	50				
18	180			10×10	65	10×13.5	55				
22	220	10×10	65								
27	270			10×13.5	70						
33	330	10×13.5	70							Case size φ D×L (mm)	Rated ripple

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	0.80	1.00	1.25	1.40	1.60

- 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.

CAT.8100C