ALUMINUM ELECTROLYTIC CAPACITORS





- 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).

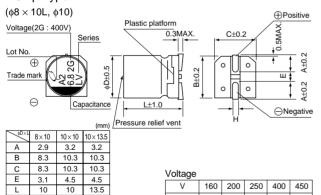




■ Specifications

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	±20% at 120π2, 20 C After 1 minute's application of rated voltage, leakage current is not more than 0.04CV+100 (μA).								
Leakage Current	Measurement frequency: 120Hz at 20°C								
Tangent of loss angle (tan δ)	Rated voltage (V) 160 200 250 400 450								
	tan δ (MAX.) 0.20 0.20 0.25 0.25 0.30								
	Measurement frequency: 120Hz								
	Rated voltage (V) 160 200 250 400 450								
Stability at Low Temperature	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. Capacitance change Within $\pm 30\%$ of the initial capacitance value $\tan \delta$ 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. Capacitance change Within $\pm 10\%$ of the initial capacitance value $\tan \delta$ 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



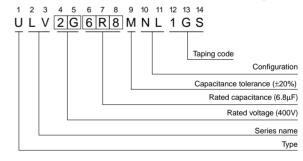
2C

2D

2E | 2G | 2W

Code

Type numbering system (Example: 400V 6.8µF)



■ Dimensions

0.8 to 1.1 0.8 to 1.1 0.8 to 1.1

V		160		200		250		400		450	
Cap.(µF)	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					Case size ϕ D $_{\times}$ L (mm)	Rated
33	330	10×13.5	70							φD×L(mm)	ripple

Rated ripple current (mArms) at 105°C 120Hz

• Frequency coefficient of rated ripple current

- 1 /					
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.