

# ALUMINUM ELECTROLYTIC CAPACITORS

**ULV** Chip Type, High Voltage.  
Long Life.



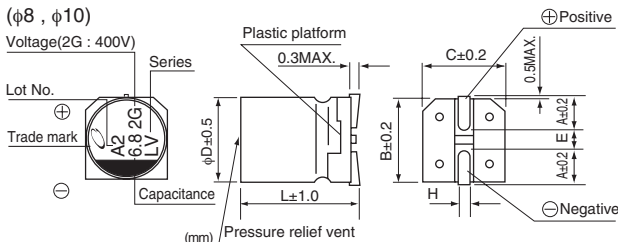
- Chip Type, high voltage and long life.
- Load life of 10000 hours at +105°C
- Applicable to automatic mounting machine using carrier tape.
- Compliant to the RoHS directive (2011/65/EU).
- AEC-Q200 compliant. Please contact us for details.



## Specifications

Item	Performance Characteristics	
Category Temperature Range	-40 to +105°C	
Rated Voltage Range	160 to 500V	
Rated Capacitance Range	1.8 to 33μF	
Capacitance Tolerance	±20% at 120Hz, 20°C	
Leakage Current	Rated voltage (V)	160 to 450
	-	0.04CV+100(μA)max.(1 minute's at 20°C)
Tangent of loss angle (tan δ)	500	
	0.04CV+200(μA)max.(1 minute's at 20°C)	
	Measurement frequency : 120Hz at 20°C	
Stability at Low Temperature	Rated voltage (V)	160 200 250 400 450 500
	tan δ (MAX.)	0.20 0.20 0.25 0.25 0.30 0.30
Endurance	Measurement frequency: 120Hz	
	Rated voltage (V)	160 200 250 400 450 500
Shelf Life	Impedance ratio	Z-40°C / Z+20°C
	ZT / Z20 (MAX.)	6 6 10 10 15 15
Resistance to soldering heat	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 ±30% of the initial capacitance value
Marking	tan δ	300% or less than the initial specified value
	Leakage current	Less than or equal to the initial specified value
Resistance to soldering heat	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.	
	Capacitance change	Within ±10% of the initial capacitance value
Marking	tan δ	Less than or equal to the initial specified value
	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 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 ±10% of the initial capacitance value
Marking	tan δ	Less than or equal to the initial specified value
	Leakage current	Less than or equal to the initial specified value
Resistance to soldering heat	Black print on the case top.	

## Chip Type

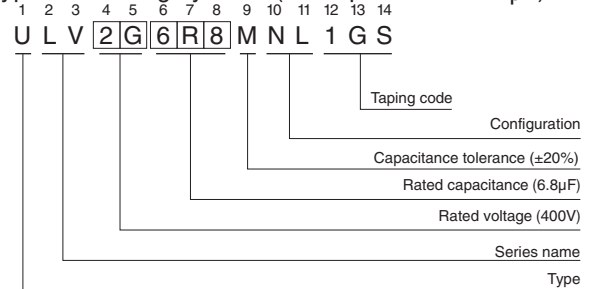


φD×L (mm)	8×10	10×10	10×13.5
A	2.9	3.2	3.2
B	8.3	10.3	10.3
C	8.3	10.3	10.3
E	3.1	4.5	4.5
L	10	10	13.5
H	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1

### Voltage

V	160	200	250	400	450	500
Code	2C	2D	2E	2G	2W	2H

## Type numbering system (Example : 400V 6.8μF)



## Dimensions

Cap.(μF)	Code	160		200		250		400		450		500	
		2C	2D	2E	2G	2W	2H						
1.8	1R8											8×10	25
3.3	3R3											10×10	40
3.9	3R9							8×10	35	8×10	25		
4.7	4R7											10×13.5	45
5.6	5R6												
6.8	6R8							10×10	50	10×10	40		
7.5	7R5											10×13.5	45
8.2	8R2					8×10	35						
10	100							10×13.5	55				
12	120												
15	150	8×10	50	8×10	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 φD×L (mm)	Rated ripple

Rated ripple current (mA rms) 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.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Nichicon:

[ULV2D120MNL1GS](#) [ULV2W3R3MNL1GS](#) [ULV2G100MNL1GS](#) [ULV2E150MNL1GS](#) [ULV2C220MNL1GS](#)  
[ULV2E180MNL1GS](#) [ULV2D180MNL1GS](#) [ULV2D270MNL1GS](#) [ULV2C330MNL1GS](#) [ULV2E8R2MNL1GS](#)  
[ULV2G6R8MNL1GS](#) [ULT2W7R5MNL1GS](#) [ULV2W5R6MNL1GS](#) [ULV2G3R9MNL1GS](#) [ULV2C150MNL1GS](#)  
[ULV2H3R3MNL1GS](#) [ULV2H4R7MNL1GS](#) [ULV2H1R8MNL1GS](#)