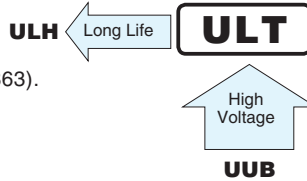


# ALUMINUM ELECTROLYTIC CAPACITORS

**ULT** Chip Type, High Voltage.  
High Temperature Range.



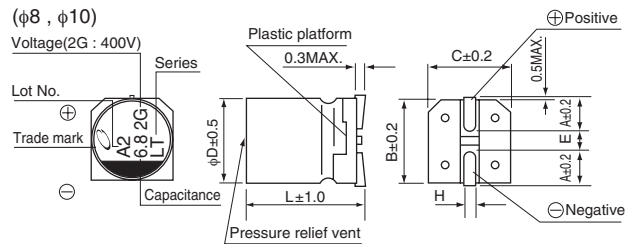
- Chip type, high voltage and high temperature range.
- Load life of 2000 hours at +125°C.
- Applicable to automatic mounting machine using carrier tape.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



## Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 to +125°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)	160-450						
	-	0.04CV+100(μA)max.(1 minute's at 20°C)						
Tangent of loss angle (tan δ)	Rated voltage (V)	500						
	-	0.04CV+200(μA)max.(1 minute's at 20°C)						
Stability at Low Temperature	Measurement frequency : 120Hz at 20°C							
	Rated voltage (V)	160	200	250	400	450	500	
Endurance	Impedance ratio ZT / Z20 (MAX.)	Z-40°C / Z+20°C	6	6	10	10	15	15
	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 125°C.		Capacitance change		Within ±30% of the initial capacitance value			
Shelf Life	After storing the capacitors under no load at 125°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.		tan δ		300% or less than the initial specified value			
	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.		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			
			tan δ		Less than or equal to the initial specified value			
Marking	Black print on the case top.		Leakage current		Less than or equal to the initial specified value			

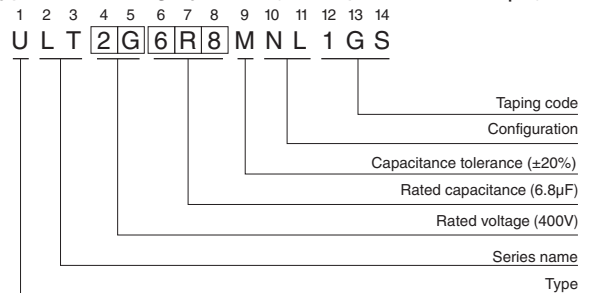
## Chip Type



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 2C	200 2D	250 2E	400 2G	450 2W	500 2H
1.8	1R8						
3.3	3R3						
3.9	3R9						
4.7	4R7						
5.6	5R6						
6.8	6R8						
7.5	7R5						
8.2	8R2						
10	100						
12	120						
15	150	8×10	45	8×10	45		
18	180			10×10	45		
22	220	10×10	60	10×13.5	50		
27	270			10×13.5	65		
33	330	10×13.5	65				

Rated ripple current (mArms) at 125°C 120Hz

## Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10kHz or more
Coefficient	0.70	1.00	1.17	1.36	1.50

- 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.