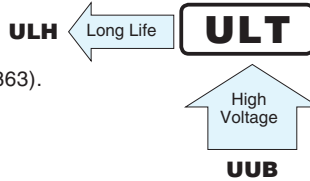


ALUMINUM ELECTROLYTIC CAPACITORS

ULT Chip Type, High Voltage.
High Temperature Range.



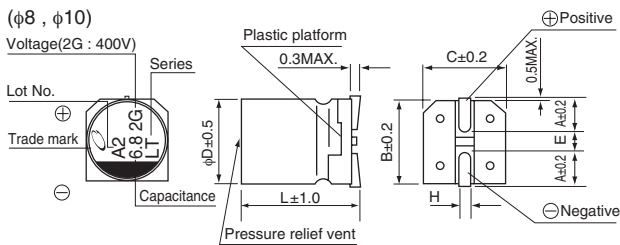
- Chip type, high voltage and high temperature range.
- Load life of 2000 hours at +125°C.
- Applicable to automatic mounting machine using carrier tape.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



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) 0.04CV+200(μA)max.(1 minute's at 20°C)					
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C						
	Rated voltage (V)	160	200	250	400	450	500
Stability at Low Temperature	Measurement frequency : 120Hz						
	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 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					
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.						
	Leakage current	Less than or equal to the initial specified value					
Marking	Black print on the case top.						

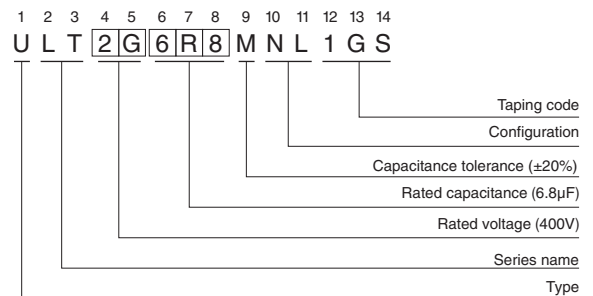
Chip Type



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

Type numbering system (Example : 400V 6.8μF)



Frequency coefficient of rated ripple current

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

● Dimension table in next page.

ULT

■ Dimensions

Rated Voltage (V) (code)	Rated Capacitance (μ F)	Case Size ϕ D \times L (mm)	tan δ	Leakage Current (μ A) (at 20°C after 1 minute)	Rated Ripple (mArms) (125°C/120Hz)	Part Number
160 (2C)	15	8 \times 10	0.20	196	45	ULT2C150MNL1GS
	22	10 \times 10	0.20	240.8	60	ULT2C220MNL1GS
	33	10 \times 13.5	0.20	311.2	65	ULT2C330MNL1GS
200 (2D)	12	8 \times 10	0.20	196	45	ULT2D120MNL1GS
	18	10 \times 10	0.20	244	60	ULT2D180MNL1GS
	27	10 \times 13.5	0.20	316	65	ULT2D270MNL1GS
250 (2E)	8.2	8 \times 10	0.25	182	30	ULT2E8R2MNL1GS
	15	10 \times 10	0.25	250	45	ULT2E150MNL1GS
	18	10 \times 13.5	0.25	280	50	ULT2E180MNL1GS
400 (2G)	3.9	8 \times 10	0.25	162.4	30	ULT2G3R9MNL1GS
	6.8	10 \times 10	0.25	208.8	45	ULT2G6R8MNL1GS
	10	10 \times 13.5	0.25	260	50	ULT2G100MNL1GS
450 (2W)	3.3	8 \times 10	0.30	159.4	20	ULT2W3R3MNL1GS
	5.6	10 \times 10	0.30	200.8	35	ULT2W5R6MNL1GS
	7.5	10 \times 13.5	0.30	235	40	ULT2W7R5MNL1GS
500 (2H)	1.8	8 \times 10	0.30	236	20	ULT2H1R8MNL1GS
	3.3	10 \times 10	0.30	266	35	ULT2H3R3MNL1GS
	4.7	10 \times 13.5	0.30	294	40	ULT2H4R7MNL1GS

- For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.