



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

ULH

Chip Type, High Voltage.
High Reliability.



For SMD



Long Life

- Chip type, High voltage and High Reliability.
- Load life of 4000 hours at +125°C.
- Applicable to automatic mounting machine using carrier tape.
- Adapted to the RoHS directive (2011/65/EU).

ULH

Long Life

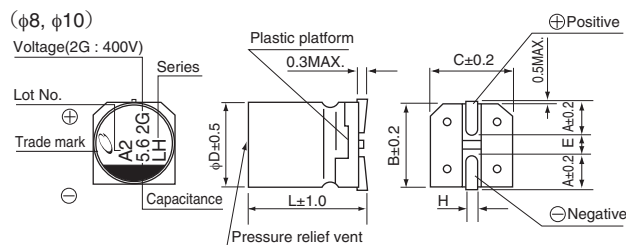
ULT



Specifications

Item	Performance Characteristics	
Category Temperature Range	-40 to +125°C	
Rated Voltage Range	160 to 450V	
Rated Capacitance Range	2.2 to 27μF	
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.)	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 4000 hours at 125°C.	
	Capacitance change	Within ±30% of the initial capacitance value
	tan δ	300% or less than the initial specified 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.	
	Capacitance change	Within ±10% of the initial capacitance value
	tan δ	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
	Leakage current	Less than or equal to the initial specified value
Marking	Black print on the case top.	

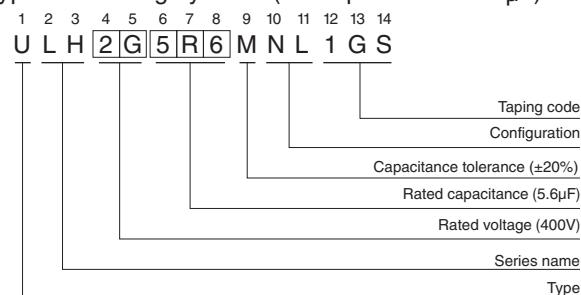
Chip Type



(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
Code		2C	2D	2E	2G	2W

Type numbering system (Example : 400V 5.6μF)



Dimensions

Cap.(μF)	V	160	200	250	400	450
Code		2C	2D	2E	2G	2W
2.2	2R2					
3.3	3R3				8 × 10	8 × 10
3.9	3R9				30	20
5.6	5R6				10 × 10	10 × 10
7.5	7R5				45	35
10	100			8 × 10	50	40
12	120	8 × 10	45	10 × 10		
15	150			10 × 13.5		
18	180	10 × 10	60			
22	220					
27	270	10 × 13.5	65			

Rated ripple current (mA_{rms}) at 125°C 120Hz

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

- 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.