## ALUMINUM ELECTROLYTIC CAPACITORS

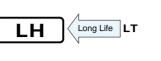




## nichicon



- 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 (2002/95/EC).

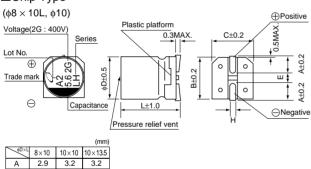




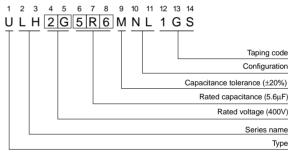
Specifications

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).									
	Measurement frequency : 120Hz at 20°C									
Tangent of loss angle (tan $\delta)$	Rated voltage (V) 160 20		00 250		450					
	tan δ (MAX.) 0.20 0	0.20	0.25	0.25	0.30					
	Measurement frequency : 120Hz									
Stability at Low Temperature	Rated voltage (V)		200	250	400	450				
	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 4000 hours at 125°C.					itance chang	Within ±30% of the initial capacitance value 300% or less than the initial specified value			
						ge current	Less than or equal to 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.									
Resistance to soldering	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet				Capac tan δ	itance chang	· · ·			
heat	the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.					ge current	Less than or equal to the initial specified value Less than or equal to the initial specified value			
Marking	Black print on the case top.	SUIEU	10 20°C.							

## Chip Type



Type numbering system (Example : 400V 5.6  $\mu F)$ 



## Dimensions

8.3 10.3

3.1

10

10.3

4.5 4.5

10 13.5

H 0.8 to 1.1 0.8 to 1.1 0.8 to 1.1

10.3

10.3

В

C 8.3

Е

V		160		200		250		400		450	
Cap.(µF)	Code	2	С	2	D	21	E	20	3	20	1
2.2	2R2									8×10	20
3.3	3R3							8×10 ¦	30		
3.9	3R9									10×10	35
5.6	5R6							10×10	45	10×13.5	40
7.5	7R5					8×10	30	10×13.5	50		
10	100			8×10	45						
12	120	8×10	45			10×10	45	-		-	
15	150			10×10	60	10×13.5	50				
18	180	10×10	60								
22	220			10×13.5	65					Case size	Rated
27	270	10×13.5	65							] ¢D×L(mm) ¦	ripple

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

• 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.



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

• Frequency coefficient of rated ripple current