ALUMINUM ELECTROLYTIC CAPACITORS



- 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).

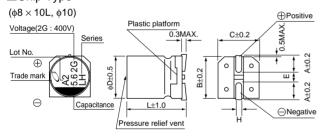




Specifications

Item	Performance Characteristics						
Category Temperature Range	-40 to +125°C						
Rated Voltage Range	160 to 450V 2.2 to 27µF						
Rated Capacitance Range							
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 δ)	Rated voltage (V) 160 200 250 400 450						
	tan δ (MAX.) 0.20 0.20 0.25 0.25 0.30						
	Measurement frequency : 120Hz						
	Rated voltage (V) 160 200 250 400 450						
Stability at Low Temperature	Impedance ratio 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. Capacitance change Within $\pm 30\%$ of the initial capacitance value $\tan \delta$ 300% or less than the initial specified value Leakage 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 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 $\pm 10\%$ of the initial capacitance value $\tan \delta$ Less than or equal to the initial specified value when they are removed from the plate.						
Marking	Black print on the case top.						

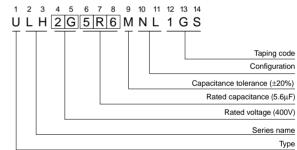
■Chip Type



			(mm)
φD×L	8×10	10×10	10×13.5
Α	2.9	3.2	3.2
В	8.3	10.3	10.3
С	8.3	10.3	10.3
Е	3.1	4.5	4.5
L	10	10	13.5
Н	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

	V		60	20	0	25	0	40		450	
Cap.(µF)	Code	2	C	2[D	28		20	3	2W	<i>l</i>
2.2	2R2					1				8×10	20
3.3	3R3					Į į		8×10	30		
3.9	3R9									10×10	35
5.6	5R6		i			1		10×10	45	10×13.5	40
7.5	7R5		i	l i		8×10	30	10×13.5	50		
10	100			8×10	45						
12	120	8×10	¦ 45	1		10×10	45				
15	150			10×10	60	10×13.5	50				
18	180	10×10	60	ì		ì					
22	220		i	10×13.5	65	i				Case size	Rated
27	270	10×135	65					!] φD×L(mm) !	ripple

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

Frequency coefficient of rated ripple current

or requested accommendation rates repries carrein								
	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.