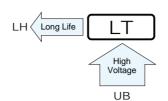


- Chip type, high voltage and high temperature range.
- Load life of 2000 hours at +125°C.
- Applicable to automatic mounting machine using carrier tape.
- Compliant to the RoHS directive (2011/65/EU).



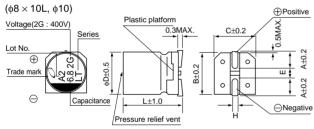




Specifications

Itom	Derformance Characteristics	_							
Item	Performance Characteristics								
Category Temperature Range	-40 to +125°C								
Rated Voltage Range	160 to 450V								
Rated Capacitance Range	3.3 to 33µF								
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								
0. 1.00	Rated voltage (V) 160 200 250 400 450								
Stability at Low Temperature	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 $\pm 30\%$ 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.								

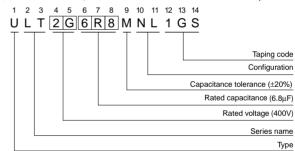
■Chip Type



				(mm)	
	, δD×L	8×10	10×10	10×13.5	
I	Α	2.9	3.2	3.2	
Ī	В	8.3	10.3	10.3	
ſ	С	8.3	10.3	10.3	
Ī	Е	3.1	4.5	4.5	
	L	10	10	13.5	
ſ	Н	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1	

١	Voltage					
	V	160	200	250	400	450
	Code	2C	2D	2E	2G	2W

Type numbering system (Example: 400V 6.8µF)



Dimensions

	V	16	0	20	0	25	0	40	0	450)
Cap.(µF)	Code	20	<u> </u>	20)	2E		20	3	2W	/
3.3	3R3							-		8×10	20
3.9	3R9	!						8×10	30		
5.6	5R6	į						į į		10×10	35
6.8	6R8							10×10	45		
7.5	7R5							-		10×13.5	40
8.2	8R2					8×10	30	-			
10	100							10×13.5	50		
12	120			8×10	45						
15	150	8×10	45			10×10	45				
18	180			10×10	60	10×13.5	50				
22	220	10×10	60								
27	270			10×13.5	65					Case size	Rated
33	330	10×13.5	65							φD×L (mm)	ripple

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

Frequency coefficient of rated ripple current

	Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more		
	Coefficient	Coefficient 0.70		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.