

GUL 5mm Height, 85°C, Low Leakage Current Series

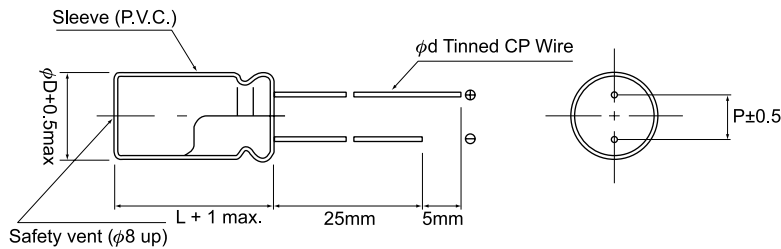
- Miniature sized and low leakage current at high reliability.
- Low cost replacement for Tantalum capacitor application.
- Life guaranteed 1,000 hours/85°C.



• Specifications

Item	Performance Characteristics						
Operating Temperature range	-40 + 85°C						
Rated Voltage	6.3V ~ 50V						
Capacitance Range	0.1 ~ 330 μF						
Capacitance Tolerance	±20% (120Hz, 20°C)						
Leakage Current	I ≤ 0.002CV or 0.4 μA, whichever is greater after 2 minutes application of rated voltage.						
Dissipation Factor (120Hz, 20°C)	Rated voltage (V)	6.3	10	16	25	35	50
	Tan δ (max.)	0.24	0.20	0.16	0.14	0.12	0.10
Temperature Characteristics (120Hz)	Impedance Ratio / Stability at Low Temperature						
	Rated voltage (V)	6.3	10	16	25	35	50
	Z (-25°C) / Z (20°C)	4	3	2	2	2	2
	Z (-40°C) / Z (20°C)	10	8	6	4	3	3
Load Life	After 1,000 hours application of WV at 85°C, capacitor shall meet the characteristics requirements mentioned below.						
	Capacitance change	Within ±20% of initial value					
	Tan δ	200% or less of initial specified value					
	Leakage current	Initial specified value or less					
Shelf Life	At 85°C, no voltage applied for 1,000 hours, the capacitor shall meet the limits as in load life.						

• Dimension (mm)



Dφ	4	5	6	8
P	1.5	2.0	2.5	3.5
φd	0.45	0.45	0.45	0.45

• Standard Products Table

WV(SV) Cap (μF)	Dφ x L (mm)											
	6.3 (10)		10 (13)		16 (20)		25 (32)		35 (44)		50 (63)	
0.1										4 x 5	1	
0.22										4 x 5	2	
0.33										4 x 5	3	
0.47										4 x 5	4	
1										4 x 5	9	
2.2										4 x 5	13	
3.3										5 x 5	17	
4.7									4 x 5	18	20	
10					4 x 5	23	5 x 5	27	5 x 5	29	6.3 x 5	33
22	4 x 5	28	5 x 5	33	5 x 5	37	6.3 x 5	42	6.3 x 5	46	8 x 5	52
33	5 x 5	37	5 x 5	41	6.3 x 5	49	6.3 x 5	52	8 x 5	62	8 x 5	71
47	5 x 5	45	6.3 x 5	52	6.3 x 5	58	8 x 5	70	8 x 5	80		
100	6.3 x 5	70	8 x 5	80	8 x 5	92						
220	8 x 5	110	8 x 5	135								
330	8 x 5	170									Case Size	Ripple

Ripple current (mA) at 85°C 120Hz