

GL series

- Super low ESR, High ripple current capability
- Rated voltage : 4~16V
- Endurance : 5,000 hours at 105°C
- Applications : Servers,LCD-TV power,Inverter etc.
- RoHS Compliance.
- Halogen Free compliant

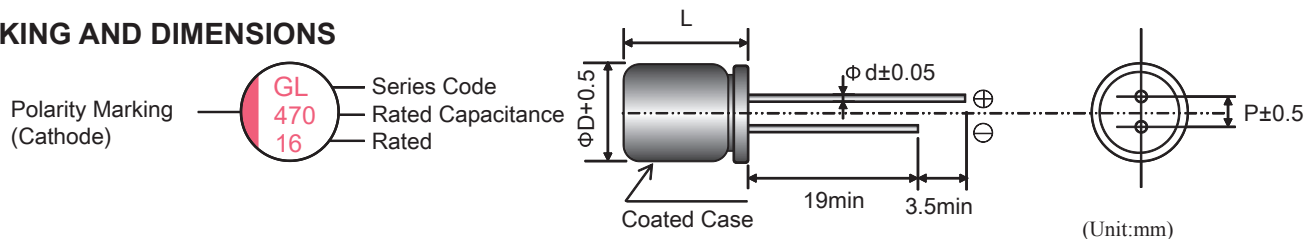
SPECIFICATIONS

Items	Conditions	Characteristics
Category Temperature Range	—	-55 to +105°C
Rated Voltage Range	—	4 ~ 16V
Capacitance Tolerance	at 20°C, 120 Hz	±20% (M)
Surge Voltage	at 105°C	Rated voltage x 1.15v
Leakage Current	at 20°C after 2 minutes	$I \leq 0.2CV$ or 300(uA) Whichever is greater measured,after 2minutes application of rated working voltage at +20°C. Please see the attached characteristics list
Dissipation Factor (tan δ)	at 20°C, 120 Hz	Please see the attached characteristics list
Characteristics of Impedance at low, high temperature	at -55°C,100kHz	$Z(-55^{\circ}\text{C}) / Z(+20^{\circ}\text{C}) \leq 1.25$
	at -25°C,100kHz	$Z(-25^{\circ}\text{C})/Z(+20^{\circ}\text{C}) \leq 1.15$
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 5,000 hours at 105°C.	Appearance NO significant damage.
		Capacitance change $\leq \pm 20\%$ of the initial value.
		DF (tan δ) $\leq 150\%$ of the initial specified value.
		ESR $\leq 150\%$ of the initial specified value.
		Leakage current $\leq$ The initial specified value.
Damp Heag (Steady State)	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjecting them to store 60°C, 90 to 95% RH for 1,000 hours, without DC applied.	Appearance NO significant damage.
		Capacitance change $\leq \pm 20\%$ of the initial value.
		DF (tan δ) $\leq 150\%$ of the initial specified value.
		ESR $\leq 150\%$ of the initial specified value.
		Leakage current $\leq$ The initial specified value.
Surge Voltage	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 105°C for 30 seconds through a protective resistor (R = 1 kΩ) and discharge for 5 minutes 30 seconds.	Appearance NO significant damage.
		Capacitance change $\leq \pm 20\%$ of the initial value.
		DF (tan δ) $\leq 150\%$ of the initial specified value.
		ESR $\leq 150\%$ of the initial specified value.
		Leakage current $\leq$ The initial specified value.

※ Note : If any doubt arises, measure the leakage current after following voltage treatment.

Voltage treatment : DC rated voltage are applied to the capacitors for 120 minutes at 105°C.

MARKING AND DIMENSIONS



Size Code	6.3×6	6.3×8	6.3×11	8×8	8×12	10×12
ΦD	6.3	6.3	6.3	8.0	8	10
L	L+1.0 max	L+1.0 max	L+1.0 max	L+1.5 max	L+1.0 max	L+1.0 max
Φd	0.45	0.5	0.5	0.6	0.6	0.6
P	2.5	2.5	2.5	3.5	3.5	5.0

Conductive Polymer Aluminum Solid Capacitors

GL SERIES STANRD CHARACTERISITICS LIST

WV/Vdc (S.V.)	Cap (μF)	Size DXL	Leakage current (uA) max. ※2	ESR (mΩ) max. 100k to 300 KHz / 20°C	Rated Ripple Current (mA rms) 100KHz / 105°C	D.F. (tanδ) max. 120Hz / 20°C
4 (4.6)	150	6.3×6	300	23	2,000	0.12
	270	6.3×8	300	23	2,390	0.12
	560	8×8	448	15	3,640	0.12
	560	8×12	448	10	5,200	0.12
	680	8×12	544	10	5,200	0.12
	1,200	10×12	960	10	5,500	0.12
6.3 (7.2)	330	6.3×8	416	20	2,000	0.12
	470	8×12	592	10	5,000	0.12
	560	6.3×8	706	20	2,000	0.12
	560	8×8	706	15	3,640	0.12
	820	10×12	1,033	10	5,500	0.12
10 (11.5)	150	6.3×8	300	20	2,000	0.12
	270	8×12	540	15	4,500	0.12
	330	8×12	660	15	4,500	0.12
	470	10×12	940	10	5,500	0.12
16 (18.4)	100	6.3×8	320	24	2,400	0.12
	270	8×12	864	15	4,500	0.12
	330	10×12	1,056	15	4,720	0.12
	470	10×12	1,504	15	4,720	0.12

※ 1. Capacitance tolerance : ±20% (M)

※ 2. After 2 minutes

FREQUENCY COEFFICIENT FOR RIPPLE CURRENT

Frequency	120Hz ≤ f < 1kHz	1kHz ≤ f < 10kHz	10kHz ≤ f < 100kHz	100kHz ≤ f < 500kHz
Coefficient	0.05	0.3	0.7	1