

# CGL series

- Low impedance, 125°C 3000 hours Long Life.
- Applicable to SMT process.
- RoHS Compliance.
- 125°C低阻抗、3000hours長壽命產品。
- 適用於SMT製程。



## SPECIFICATIONS

Items 項目	Characteristics 特性				
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20°C)				
Operating Temperature Range 適用溫度範圍	-40 ~ +125°C				
Rated Voltage Range 額定電壓範圍	16~50VDC				
Capacitance Range 靜電容量範圍	33~330μF				
Leakage Current 洩漏電流	I ≤ 0.01CV or 3 (μA), which is greater. ( After 2 minutes application of DC rated voltage, at 20°C)				
Dissipation Factor 散逸因素( tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C				
	Rated Voltage(V)	16	25	35	50
	tan δ(Max)	0.23	0.18	0.16	0.14
Low Temperature Stability 低溫特性 Impedance Ratio(Max) 阻抗比率(最大值)	Measurement Frequency: 120Hz.				
	Rated Voltage(V)	16	25	35	50
	Z(-25°C)/Z(20°C)	3	3	2	2
	Z(-40°C)/Z(20°C)	4	4	3	3
Load Life 負荷壽命	3000hours,with application of rated voltage at 125°C				
	Capacitance Change	Within ±30% of Initial Value			
	tan δ	300% or less of Initial Specified Value			
	Leakage Current	Initial Specified Value or less			
Shelf Life 放置壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.				
	Capacitance Change	Within ±30% of Initial Value			
	tan δ	300% or less of Initial Specified Value			
	Leakage Current	Initial Specified Value or less			
Resistance to Soldering Heat 焊錫耐熱性	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature they meet the characteristics requirements listed at right.			Capacitance Change	Within ± 10% of Initial Value
				tan δ	Initial Specified Value
				Leakage Current	Initial Specified Value or less
Standards 參照標準	JIS C 5101-4-1 (IEC 60384)				

## Frequency Coefficient of Permissible Ripple Current

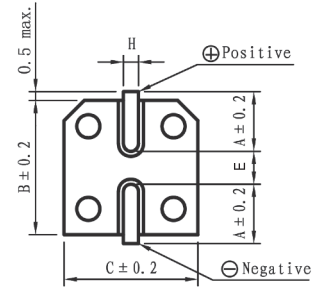
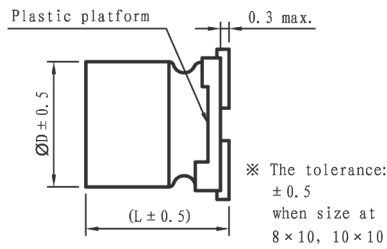
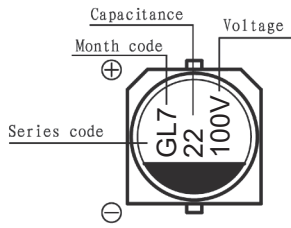
Frequency (Hz)	120 ≤ F < 1K	1K ≤ F < 10K	10K ≤ F < 100K	100K ≤ F
Capacitance (μF)				
33~330	0.4	0.75	0.9	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use , the rms ripple current has to be reduced.

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## DIMENSIONS(mm)

### Chip Type



CGL

	(mm)	
$\phi$ D×L	8x10	10x10
A	2.9	3.2
B	8.3	10.3
C	8.3	10.3
E	3.1	4.5
L	10	10
H	0.8~1.1	0.8~1.1

## STANDARD RATINGS

D×L(mm) ; R.C.(mA rms) at 125°C 100KHz, ESR (  $\Omega$  max)

Cap ( $\mu$ F)	V	16				25				35				50				
		Item	D x L	R.C.	ESR		D x L	R.C.	ESR		D x L	R.C.	ESR		D x L	R.C.	ESR	
					20°C	-40°C			20°C	-40°C			20°C	-40°C			20°C	-40°C
33														8x10	250	0.36	4.5	
47														8x10	250	0.36	4.5	
										8x10	300	0.30	4.5	10x10	350	0.25	3	
100										8x10	300	0.30	4.5	10x10	350	0.25	3	
										8x10	300	0.30	4.5	10x10	500	0.20	3	
220										8x10	300	0.30	4.5	10x10	500	0.20	3	
										10x10	500	0.20	3					
330										10x10	500	0.20	3					