CGV series

- Chip type with 8Ø~16Ø, 125℃, 2,000 hours, long life product.
- Peak acceleration: 30G
- RoHS Compliance.
- 8Ø~16ØV-Chip型,125℃, 2,000小時長壽命產品。
- 專為汽車模組和其它高溫應用設計。
- 峰值加速度：30G。

SPECIFICATIONS

Items 項 目	Characteristics 特 性							
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20℃)							
Operating Temperature Range 適用溫度範圍	-55 ~ +125℃							
Rated Voltage Range 額定電壓範圍	6.3 ~ 100VDC							
Capacitance Range 靜電容量範圍	1 ~ 4700μF							
Leakage Current 洩漏電流	I ≦ 0.01CV or 3(μA)，which is greater. (After 3 minutes application of DC rated voltage, at 20℃)							
Dissipation Factor 散逸因素(tan δ)	Measurement Frequency: 120Hz. Temperature: 20℃							
	Rated Voltage(V)	6.3	10	16	25	35	50	63	100
	tan δ(Max)	0.30	0.24	0.20	0.16	0.14	0.14	0.12	0.10
Low Temperature Stability 低溫特性 Impedance Ratio(Max) 阻抗比率(最大值)	Measurement Frequency: 120Hz.							
	Rated Voltage(V)	6.3	10	16	25	35	50	63	100
	Z(-25℃)／Z(20℃)	4	3	2	2	2	2	2	2
	Z(-40℃)／Z(20℃)	8	6	4	3	3	3	3	3
Load Life 負荷壽命	6.3V~50V:2,000hours;63V~100V:1,500 hours with application of rated voltage at 125℃							
	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℃ after exposing them for 1,000 hours 125℃ 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 ± 300% 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℃ 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	Black print on the case top							

Frequency Coefficient of Permissible Ripple Current

Frequency (Hz) / Capacitance (μF)	100 ≦ F < 1K	1K ≦ F < 10K	10K ≦ F < 100K	100K ≦ F
C≦22	0.50	0.80	0.90	1.00
22 < C≦150	0.65	0.85	0.92	1.00
150 < C	0.70	0.85	0.95	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℃ 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

Fig.1 ØD=8~10mm

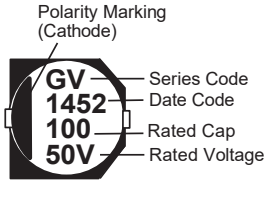
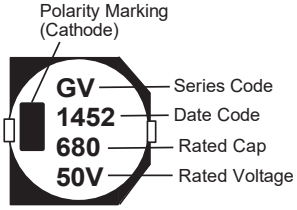
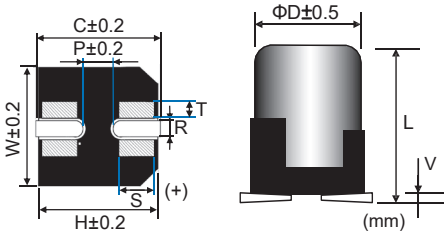


Fig.2 ØD≧12.5mm





(mm)

Size	ØD	L	W	H	C	R	P	S	T	Vmax
8×10.5	8.0	10.5±0.5	8.3	8.3	9.0	0.7~1.1	3.2	0.7	1.6	0.3
10×10.5	10.0	10.5±0.5	10.3	10.3	11.0	1.0~1.4	4.5	0.7	1.6	0.3
12.5×13.5	12.5	13.5±1	13.5	13.5	14.2	1.0~1.4	4.5	2.2	2.4	0.4
16×16.5	16.0	16.5±1	17.0	17.0	18.0	1.8~2.1	6.4	3.0	2.0	0.4

CGV

STANDARD RATINGS

D×L(mm) ; R.C.(mA rms) at 125℃ 100KHz, IMP(Ω max) at 20℃ 100KHz.

Cap (μF)	V	6.3			10			16			25		
	Item	D x L	R.C.	IMP	DxL	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
100								8x10.5	160	0.40	8x10.5	160	0.40
220								8x10.5	160	0.40	8x10.5	160	0.40
					8x10.5	160	0.40				10x10.5	220	0.30
330		8x10.5	160	0.40	8x10.5	160	0.40	10x10.5	220	0.30	10x10.5	220	0.30
											12.5x13.5	550	0.12
470		8x10.5	160	0.40	10x10.5	220	0.30	12.5x13.5	550	0.12	12.5x13.5	550	0.12
680		10x10.5	220	0.30	12.5x13.5	550	0.12	12.5x13.5	550	0.12	12.5x13.5	550	0.12
1000		12.5x13.5	550	0.12	12.5x13.5	550	0.12	12.5x13.5	550	0.12	16x16.5	900	0.080
1500		12.5x13.5	550	0.12	12.5x13.5	550	0.12	16x16.5	900	0.080	16x16.5	900	0.080
2200		12.5x13.5	550	0.12	16x16.5	900	0.080	16x16.5	900	0.080			
3300		16x16.5	900	0.08	16x16.5	900	0.080						
4700		16x16.5	900	0.08									

Cap (μF)	V	35			50			63			100		
	Item	D x L	R.C.	IMP	DxL	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
10											8x10.5	70	1.00
22								8x10.5	100	1.00	8x10.5	70	1.00
33								8x10.5	100	1.00	10x10.5	115	0.80
					8x10.5	140	0.70						
47					8x10.5	140	0.70	8x10.5	100	1.00	12.5x13.5	350	0.33
	8x10.5	160	0.40	10x10.5	240	0.50	10x10.5	150	0.50				
100	8x10.5	160	0.40	10x10.5	240	0.50	10x10.5	150	0.50	16x16.5	500	0.24	
	10x10.5	220	0.30	12.5x13.5	490	0.23	12.5x13.5	350	0.25				
220	10x10.5	220	0.30	12.5x13.5	490	0.23	12.5x13.5	350	0.25				
	12.5x13.5	550	0.12				16x16.5	500	0.18				
330	12.5x13.5	550	0.12	12.5x13.5	490	0.23	16x16.5	500	0.18				
				16x16.5	800	0.15							
470.0	12.5x13.5	550	0.12	16x16.5	800	0.15	16x16.5	500	0.18				
	16x16.5	900	0.080										
680.0	16x16.5	900	0.080	16x16.5	800	0.15							
1000.0	16x16.5	900	0.080										