

CGV series

- Chip type with 8Φ~16Φ, 125°C, 1500 hours~2000 hours, long life product.
- Designed For automobile modules and other high temperature applications.
- Peak acceleration: 30G
- RoHS Compliance.
- 8Φ~16ΦV-Chip 型, 125°C, 1500小時~2000小時 長壽命產品。
- 專為汽車模塊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°C)									
Operating Temperature Range 適用溫度範圍	-55 ~ +125°C									
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	$I \leq 0.01CV$ or $3(\mu A)$ · which is greater. (After 3 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)	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°C)/Z(20°C)	4	3	2	2	2	2	2	2	2
	Z(-40°C)/Z(20°C)	8	6	4	3	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°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 1,000 hours 125°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	IEC 60384-4 (JIS C 5101-4)									

Frequency Coefficient of Permissible Ripple Current

Frequency (Hz)	100 ≤ F < 1K	1K ≤ F < 10K	10K ≤ F < 100K	100K ≤ F
Capacitance (μF)				
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

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DIMENSIONS(mm)

Chip Type

Fig.1 $\Phi D=8\sim 10\text{mm}$

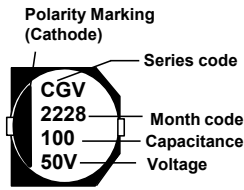
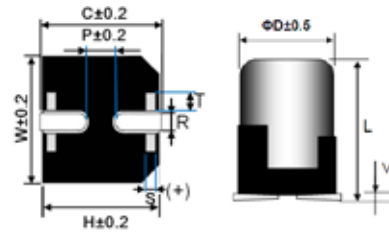
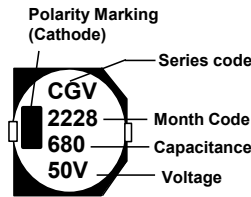


Fig.2 $\Phi D \geq 12.5\text{mm}$



(mm)

Size	ΦD	L	W	H	C	R	P	S	T	Vmax
8 × 10.5	8.0	10.5 ± 0.5	8.3	8.3	9.0	1.0~1.4	3.2	0.7	1.3	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	1.3	0.3
12.5 × 13.5	12.5	13.5 ± 1.0	13.5	13.5	14.2	1.1~1.4	4.5	2.2	2.4	0.4
16 × 16.5	16.0	16.5 ± 1.0	17.0	17.0	18.0	1.7~2.1	6.4	3.0	2.0	0.4

STANDARD RATINGS

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

Cap (μF)	V Item	6.3			10			16			25		
		D x L	R.C.	ESR	DxL	R.C.	ESR	D x L	R.C.	ESR	D x L	R.C.	ESR
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 Item	35			50			63			100		
		D x L	R.C.	ESR	DxL	R.C.	ESR	D x L	R.C.	ESR	D x L	R.C.	ESR
10											8x10.5	70	1.00
22								8x10.5	100	1.00	8x10.5	70	1.00
33					8x10.5	140	0.70	8x10.5	100	1.00	10x10.5	115	0.80
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									