

CTS series

- Chip type with 8Ø~16Ø, 125°C, 5,000 hours, long life product.
- Designed For automobile modules and other high temperature applications.
- RoHS Compliance.
- 8Ø~16ØV-Chip型，125°C，5000小時長壽命產品。
- 專為汽車模組和其它高溫應用設計。



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	33~2200µF					
Leakage Current 洩漏電流	$I \leq 0.01CV$ or $3(\mu A)$, which is greater. (After 2 minutes application of DC rated voltage, at 20°C)					
Dissipation Factor 散逸因素($\tan \delta$)	Measurement Frequency: 120Hz. Temperature: 20°C					
	Rated Voltage(V)	16	25	35	50	
	$\tan \delta$ (Max)	0.20	0.20	0.14	0.14	
Low Temperature Stability 低溫特性	Measurement Frequency: 120Hz.					
	Rated Voltage(V)	16	25	35	50	
	Impedance Ratio(Max) 阻抗比率(最大值)	$Z(-25^\circ C)/Z(20^\circ C)$	5	2	2	2
		$Z(-40^\circ C)/Z(20^\circ C)$	8	4	3	3
Load Life 負荷壽命	$\Phi 6.3\sim 10:2000$ hours; $\Phi 12.5:3000$ hours ; $\Phi 16: 5000$ hours with application of rated voltage at 125°C					
	Capacitance Change	Within ±30% of Initial Value				
	$\tan \delta$	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 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				
	$\tan \delta$	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.			Capacitance Change	Within ± 10% of Initial Value	
	After removing from the hot plate and restored at room temperature they meet the characteristics requirements listed at right.			$\tan \delta$	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)	100 ≤ F < 1K	1K ≤ F < 10K	10K ≤ F < 100K	100K ≤ F
Capacitance (µF)				
全系列	0.60	0.85	0.93	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

Fig.1 $\varnothing D=6\sim 10\text{mm}$

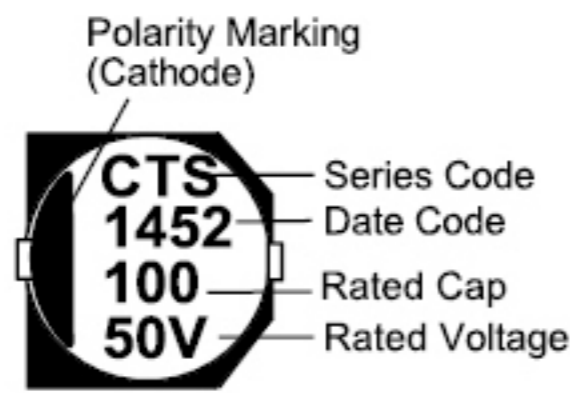
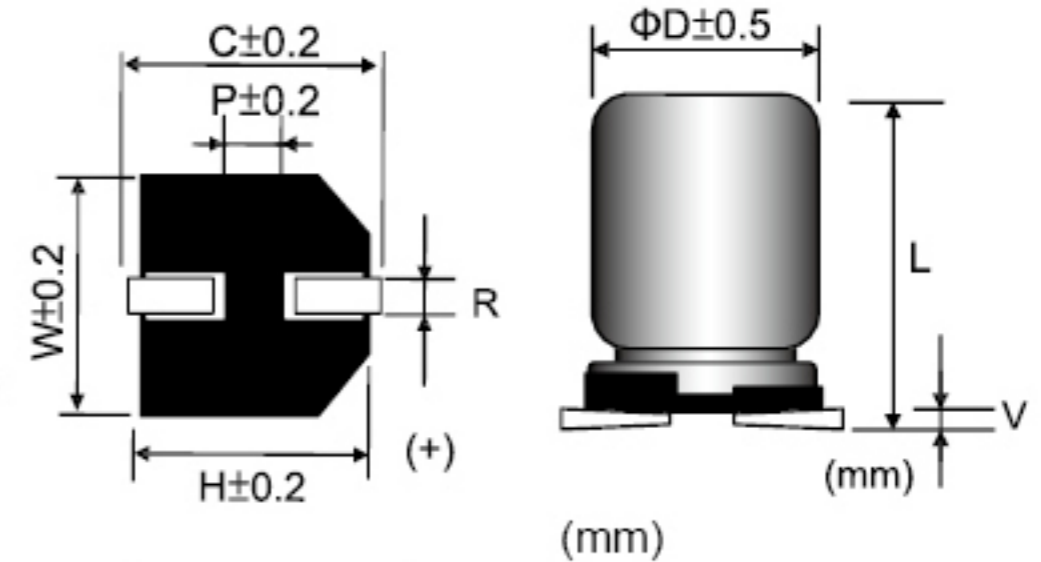
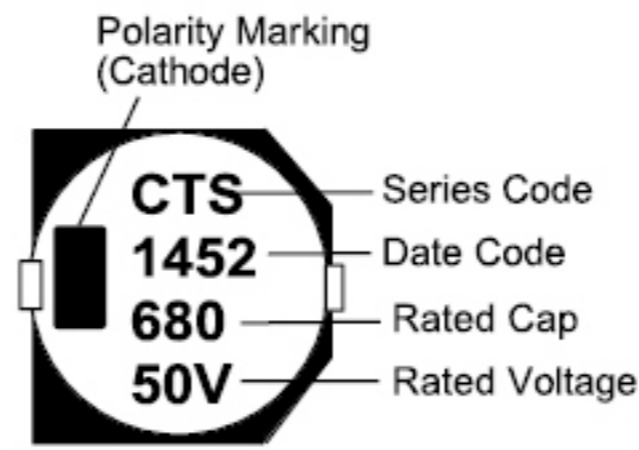


Fig.2 $\varnothing D \geq 12.5\text{mm}$



Size	$\varnothing D$	L	W	H	C	R	P	Vmax
6.3×6.0	6.3	6.0±0.3	6.6	6.6	7.2	0.5~0.8	2.1	0.3
6.3×7.7	6.3	7.7±0.3	6.6	6.6	7.2	0.5~0.8	2.1	0.3
8×10	8.0	10±0.5	8.3	8.3	9.0	0.7~1.1	3.2	0.3
10×10	10.0	10±0.5	10.3	10.3	11.0	0.7~1.1	4.5	0.3
12.5×13.5	12.5	13.5±0.5	13.0	13.0	13.7	1.1~1.4	4.5	0.4
16×16.5	16.0	16.5±0.5	17.0	17.0	18.0	1.4~1.8	6.4	0.4
18×16.5	18.0	16.5±1.0	19.0	19.0	20.0	1.4~1.8	7.0	0.4
18×21.5	18.0	21.5±1.0	19.0	19.0	20.0	1.4~1.8	7.0	0.4

CTS

STANDARD RATINGS

D×L(mm) ; R.C.(mA rms) at 105°C 100KHz, IMP(Ω max) at 20°C 100KHz.

Cap (μF)	V	16.0			25			35			50		
		Item	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.
10											6.3x6.0	70	2.00
22								6.3x6.0	110	1.60			
33					6.3x6.0	110	1.60	6.3x6.0	110	1.60			
								6.3x7.7	200	0.45			
47		6.3x6.0	110	1.60				6.3x7.7	200	0.45	8x10	250	0.45
100		6.3x7.7	200	0.45	6.3x7.7	200	0.45	8x10	300	0.18	10x10	350	0.30
160								8x10	300	0.18			
220					8x10	300	0.18	10x10	500	0.11	12.5x13.5	700	0.15
270					8x10	300	0.18						
300								10x10	500	0.11			
330		8x10	300	0.18	10x10	500	0.11	12.5x13.5	1200	0.08			
390		8x10	300	0.18									
470		10x10	500	0.11	10x10	500	0.11	12.5x13.5	1200	0.08	16x16.5	1000	0.09
620								12.5x13.5	1200	0.08			
680		10x10	500	0.11	12.5x13.5	1200	0.08	16x16.5	1800	0.05	18x16.5	1200	0.07
910					12.5x13.5	1200	0.08						
1000		12.5x13.5	1200	0.08	16x16.5	1800	0.05	16x16.5	1800	0.05	18x21.5	1650	0.05
1500		12.5x13.5	1200	0.08	16x16.5	1800	0.05	18x16.5	2000	0.045			
2200		16x16.5	1800	0.05	18x21.5	2000	0.045	18x21.5	2200	0.04			
3300		18x16.5	2000	0.045	18x21.5	2200	0.04						
3900		18x21.5	2200	0.04									