

# CN series

- Non-polarity V-chip.
- Applicable to SMT process.
- RoHS Compliance.
- V-Chip 無極性產品。
- 適用於SMT製程。



## SPECIFICATIONS

Items 項目	Characteristics 特性						
Capacitance Tolerance 靜電容量誤差	$\pm 20\%$ (120Hz,20°C)						
Operating Temperature Range 適用溫度範圍	-55 ~ +85°C						
Rated Voltage Range 額定電壓範圍	6.3 ~ 50VDC						
Capacitance Range 靜電容量範圍	0.1 ~ 100μF						
Leakage Current 洩漏電流	$I \leq 0.03CV$ or 5 ( $\mu$ 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)	6.3	10	16	25	35	50
Low Temperature Stability 低温特性	$\tan \delta$ (Max)	0.30	0.25	0.20	0.17	0.15	0.15
	Measurement Frequency: 120Hz.						
	Rated Voltage(V)	6.3	10	16	25	35	50
	Z(-25°C)/Z(20°C)	4	3	2	2	2	2
Impedance Ratio(Max) 阻抗比率(最大值)	Z(-55°C)/Z(20°C)	8	6	4	4	3	3
	1000hours,with application of rated voltage at 85°C						
	Capacitance Change	Within $\pm 20\%$ of Initial Value					
	$\tan \delta$	200% or less of Initial Specified Value					
Load Life 負荷壽命	Leakage Current	Initial Specified Value or less					
	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 85°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 $\pm 20\%$ of Initial Value					
	$\tan \delta$	200% or less of Initial Specified Value					
Shelf Life 放置壽命	Leakage Current	Initial Specified Value or less					
	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds.			Capacitance Change	Within $\pm 10\%$ 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		
Marking 標識	Black print on the case top						

## Frequency Coefficient of Permissible Ripple Current

Frequency (Hz)	50	120	300	1K	$\geq 10K$
Coefficient	0.70	1.00	1.17	1.36	1.50

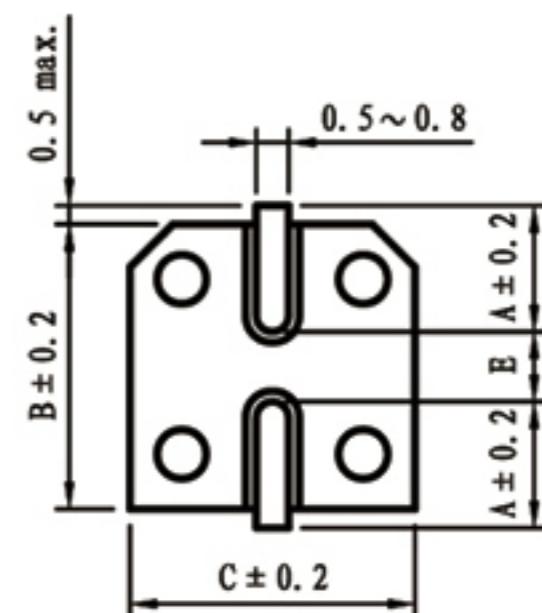
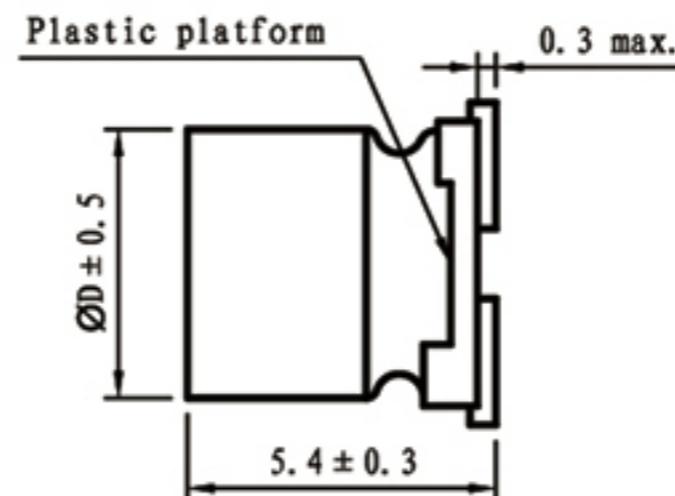
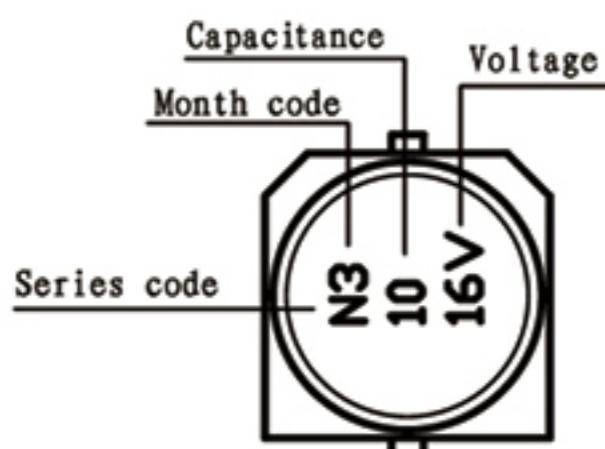
The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 10°C rise. When long life performance is required in actual use , the rms ripple current has to be reduced.

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## DIMENSIONS(mm)

Chip Type



$\phi$ D x L	4x5.4	5x5.4	6.3x5.4
A	1.8	2.1	2.4
B	4.3	5.3	6.6
C	4.3	5.3	6.6
E	1.0	1.4	2.1

## STANDARD RATINGS

D x L(mm) ; R.C.(mA rms) at 85°C 120Hz.

Cap ( $\mu$ F)	V	6.3		10		16		25		35		50		
		Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
0.1													4x5.4	1.0
0.22													4x5.4	2.0
0.33													4x5.4	2.8
0.47													4x5.4	4.0
1													4x5.4	8.4
2.2													4x5.4	13
3.3													5x5.4	17
4.7							4x5.4	12	5x5.4	16	5x5.4	18	6.3x5.4	20
10				4x5.4	17	5x5.4	23	6.3x5.4	27	6.3x5.4	29	6.3x5.4	40	
22	4x5.4	28	4x5.4	33	5x5.4	37	6.3x5.4	50						
33	6.3x5.4	37	6.3x5.4	41	6.3x5.4	49								
47	6.3x5.4	45	6.3x5.4	54										
100	6.3x5.4	65												