

CD series

- Low impedance, 105°C V-chip.
- Applicable to SMT process.
- RoHS Compliance.
- 105°C低阻抗、V-Chip型產品。
- 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	-55 ~ +105°C									
Rated Voltage Range 額定電壓範圍	6.3 ~ 100VDC									
Capacitance Range 靜電容量範圍	1 ~ 1500μF									
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)	6.3	10	16	25	35	50	63	80	100
	tan δ(Max)	0.30	0.26	0.22	0.16	0.13	0.10	0.08	0.08	0.07
Low Temperature Stability 低溫特性	Measurement Frequency: 120Hz.									
	Rated Voltage(V)	6.3	10	16	25	35	50	63	80	100
	Impedance Ratio(Max) 阻抗比率(最大值)	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2
	Z(-55°C)/Z(20°C)	8	5	4	3	3	3	3	3	
Load Life 負荷壽命	3000hours,with application of rated voltage at 105°C(ØD=4~6.3mm : 2000hrs)									
	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 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			
Marking 標識	Black print on the case top									

Frequency Coefficient of Permissible Ripple Current

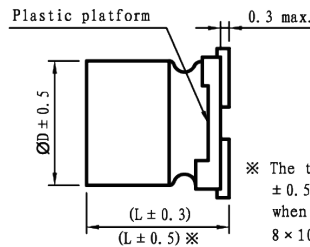
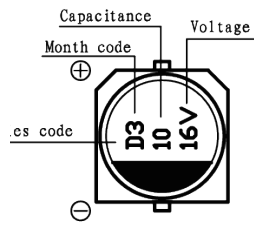
Frequency (Hz)	120 ≤ F < 1K	1K ≤ F < 10K	10K ≤ F < 100K	100K ≤ F
≤ 33	0.35	0.70	0.90	1.00
33 ~ 150	0.40	0.85	0.92	1.00
> 150	0.60	0.85	0.95	1.00

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

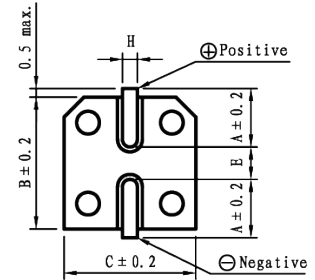
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DIMENSIONS(mm)

Chip Type



※ The tolerance: ± 0.5 when size at $8 \times 10, 10 \times 10$



(mm)

ϕ D x L	4x5.4	5x5.4	6.3x5.4	6.3x7.7	8x10	10x10
A	1.8	2.1	2.4	2.4	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	10.3
E	1.0	1.3	2.2	2.2	3.1	4.5
L	5.4	5.4	5.4	7.7	10	10
H	0.5~0.8	0.5~0.8	0.5~0.8	0.5~0.8	0.8~1.1	0.8~1.1

STANDARD RATINGS

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

Cap (μ F)	V	6.3			10			16			25			35		
		Item	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.
4.7														4x5.4	80	2.0
10								4x5.4	80	2.0	4x5.4	80	2.0	5x5.4	150	1.20
22		4x5.4	80	2.0	4x5.4	80	2.0	5x5.4	150	1.20	5x5.4	150	1.20	6.3x5.4	230	0.80
33		4x5.4	80	2.0	5x5.4	150	1.20	5x5.4	150	1.20	6.3x5.4	230	0.80	6.3x5.4	230	0.80
47		5x5.4	150	1.20	5x5.4	150	1.20	5x5.4	150	1.20	6.3x5.4	230	0.80	6.3x5.4	230	0.80
100		6.3x5.4	230	0.80	6.3x5.4	230	0.80	6.3x5.4	230	0.80	6.3x7.7	280	0.58	8x10	450	0.22
150		6.3x5.4	230	0.80	6.3x5.4	230	0.80	6.3x7.7	280	0.58	8x10	450	0.22	8x10	450	0.22
220		6.3x5.4	230	0.80	6.3x7.7	280	0.58	6.3x7.7	280	0.58	8x10	450	0.22	10x10	670	0.15
330		8x10	450	0.22	8x10	450	0.22	8x10	450	0.22	8x10	450	0.22			
470		8x10	450	0.22	8x10	450	0.22	8x10	450	0.22	10x10	670	0.15			
								10x10	670	0.15						
680		8x10	450	0.22	10x10	670	0.15	10x10	670	0.15						
1000		8x10	450	0.22	10x10	670	0.15									
1500		10x10	670	0.15												

Cap (μ F)	V	50			63			80			100		
		Item	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.
1		4x5.4	60	9.0									
2.2		4x5.4	60	9.0									
3.3		4x5.4	60	9.0	5x5.4	85	5.0	5x5.4	50	5.3			
4.7		5x5.4	85	5.0	5x5.4	85	5.0	6.3x5.4	60	4.8			
10		6.3x5.4	165	2.2	6.3x5.4	165	2.2				8x10	130	1.88
22		6.3x5.4	165	2.2	6.3x7.7	185	1.4	8x10	130	1.88	10x10	200	0.90
33		6.3x7.7	185	1.4	8x10	369	0.85	10x10	200	0.90	10x10	200	0.90
47		6.3x7.7	185	1.4	8x10	369	0.85	10x10	200	0.90	10x10	200	0.90
68		8x10	369	0.68	10x10	450	0.48	10x10	200	0.90			
100		8x10	369	0.68	10x10	553	0.48						
		10x10	553	0.48									
150		10x10	553	0.48									