

CDV series

- Low impedance, 105°C 5000 hours.
- Applicable to SMT process.
- RoHS Compliance.
- Peak acceleration: 30G
- 105°C 低阻抗、5000小時 長壽命產品。



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°C ~ +105°C									
Rated Voltage Range 額定電壓範圍	6.3~100VDC									
Capacitance Range 靜電容量範圍	22~12000μF									
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	0.14	0.14	0.08	0.08	0.07
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	80	100
	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2	2	2
	Z(-55°C)/Z(20°C)	8	5	4	3	3	3	3	3	3
Load Life 負荷壽命	5000hours, with application of rated voltage at 105°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 1000 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		
Standards 參照標準	IEC 60384-4 (JIS C 5101-4)									

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

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DIMENSIONS(mm)

Chip Type

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

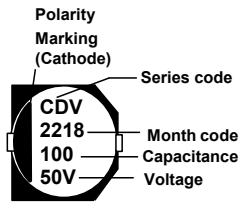
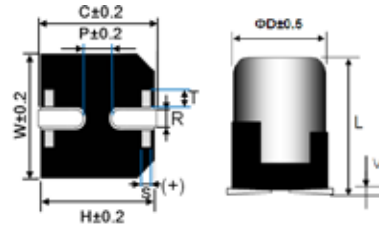
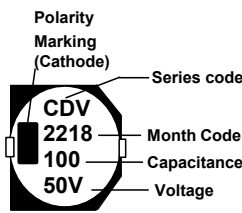


Fig.2 $\Phi D\geq 12.5\text{mm}$



(mm)

Size	ΦD	L	W	H	C	R	P	S	T	Vmax
8 × 10.5	8.0	10 ± 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 ± 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	1.4~1.8	6.4	3.0	2.0	0.4
18 × 16.5	18.0	16.5 ± 1.0	19.0	19.0	20.0	1.4~1.8	6.4	3.0	2.0	0.4
18 × 21.5	18.0	21.5 ± 1.0	19.0	19.0	20.0	1.4~1.8	6.4	3.0	2.0	0.4

STANDARD RATINGS

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

Cap (μF)	V	6.3			10			16			25			35		
		Item	D x L	R.C.	ESR	D x L	R.C.	ESR	D x L	R.C.	ESR	D x L	R.C.	ESR	D x L	R.C.
100														8x10.5	600	0.170
150											8x10.5	600	0.170	8x10.5	600	0.170
220											8x10.5	600	0.170	10x10.5	850	0.090
330					8x10.5	600	0.170	8x10.5	600	0.170	8x10.5	600	0.170			
470	8x10.5	600	0.170	8x10.5	600	0.170	8x10.5	600	0.170	10x10.5	850	0.090	12.5x13.5	1100	0.060	
680	8x10.5	600	0.170	10x10.5	850	0.090	10x10.5	850	0.090	12.5x13.5	1100	0.060	12.5x13.5	1100	0.060	
1000	8x10.5	600	0.170	10x10.5	850	0.090	10x10.5	850	0.090	12.5x13.5	1100	0.060	16x16.5	1800	0.035	
							12.5x13.5	1,100	0.060							
1500	10x10.5	850	0.090	12.5x13.5	1100	0.060	12.5x13.5	1,100	0.060	16x16.5	1800	0.035	16x16.5	1800	0.035	
2200	12.5x13.5	1100	0.060	12.5x13.5	1100	0.060				16x16.5	1800	0.035	18x16.5	2060	0.033	
2700													18x21.5	2060	0.028	
3300							16x16.5	1,800	0.035	18x16.5	2060	0.033				
3900										18x21.5	2060	0.028				
4700				16x16.5	1800	0.035	18x16.5	2,060	0.033							
5600							18x21.5	2,060	0.028							
6800	16x16.5	1800	0.035	18x16.5	2060	0.033										
8200	18x16.5	2060	0.033	18x21.5	2060	0.028										
10000	18x16.5	2060	0.033													
12000	18x16.5	2060	0.033													

Cap (μF)	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.
22											8x10.5	130	1.88
33								8x10.5	130	1.88	10x10.5	200	0.650
47					8x10.5	200	0.700	10x10.5	200	0.900	12.5x13.5	500	0.320
56	8x10.5	330	0.340	10x10.5	369	0.480							
68	8x10.5	330	0.340								12.5x13.5	500	0.320
100	8x10.5	330	0.340	12.5x13.5	800	0.160	12.5x13.5	500	0.320	16x16.5	793	0.170	
150	10x10.5	670	0.180	12.5x13.5	800	0.160	12.5x13.5	500	0.320	16x16.5	793	0.170	
220				12.5x13.5	800	0.160					18x16.5	917	0.153
330	12.5x13.5	900	0.120	16x16.5	1410	0.082	16x16.5	793	0.170	18x21.5	1230	0.083	
470	16x16.5	1610	0.073	16x16.5	1410	0.082	18x16.5	917	0.153				
680	16x16.5	1610	0.073	18x16.5	1690	0.080							
1,000	16x16.5	1610	0.073	18x21.5	1960	0.055							
1,200	18x16.5	1900	0.068										
1,500	18x21.5	2100	0.042										