

CDS series

- Low impedance, 105°C 2000 hours High CV.
- Applicable to SMT process.
- RoHS Compliance.
- 105°C 低阻抗、2000小時 高比容產品。
- 適用于SMT制程。



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°C ~ + 105°C						
Rated Voltage Range 額定電壓範圍	6.3~50VDC						
Capacitance Range 靜電容量範圍	10~2200μF						
Leakage Current 洩漏電流	$I \leq 0.01CV$ or 3 (μA) , which is greater. (After 2 minutes application of DC rated voltage, at 20°C)						
Dissipation Factor 散逸因素($\tan \delta$)	Measurement Frequency: 120Hz. Temperature: 20°C						
	Rated Voltage(V)	6.3	10	16	25	35	50
	$\tan \delta$ (Max)	0.26	0.19	0.16	0.14	0.12	0.10
Low Temperature Stability 低溫特性	Measurement Frequency: 120Hz.						
	Rated Voltage(V)	6.3	10	16	25	35	50
Impedance Ratio(Max) 阻抗比率(最大值)	Z(-25°C)/Z(20°C)	4	3	2	2	2	2
	Z(-40°C)/Z(20°C)	8	5	4	3	3	3
Load Life 負荷壽命	2000hours,with application of rated voltage at 105°C						
	Capacitance Change	within $\pm 30\%$ of Initial Value					
	$\tan \delta$	200% 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 1000hours 105°C without voltage applied. Before the measurement. The Capacitance shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.						
	Capacitance Change	within $\pm 30\%$ of Initial Value					
	$\tan \delta$	200% 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 $\pm 10\%$ of Initial Value	
					$\tan \delta$	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

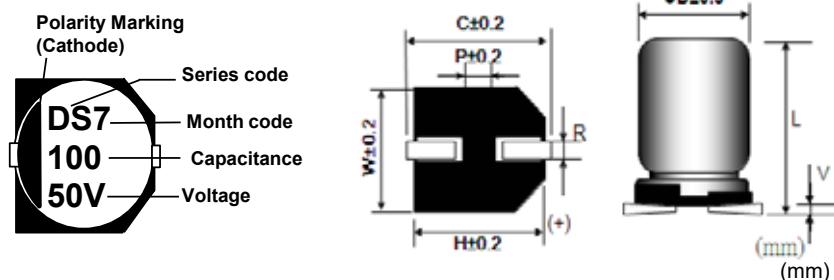
Frequency (Hz) Capacitance (μF)	120 $\leq F < 1K$	1K $\leq F < 10K$	10K $\leq F < 100K$	100K $\leq F$
≤ 470	0.35	0.70	0.90	1.00
>470	0.40	0.85	0.92	1.00

CDS

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DIMENSIONS(mm)

Chip Type



Size	ΦD	L	W	H	C	R	P	V _{max}
4x6.0	4.0	6.0±0.3	4.3	4.3	5.1	0.5~0.8	1.0	0.3
5x6.0	5.0	6.0±0.3	5.3	5.3	5.9	0.5~0.8	1.4	0.3
6.3x6.0	6.3	6.0±0.3	6.6	6.6	7.2	0.5~0.8	2.1	0.3
6.3x7.7	6.3	7.7±0.3	6.6	6.6	7.2	0.5~0.8	2.1	0.3
8x10	8.0	10±0.5	8.3	8.3	9.0	0.7~1.1	3.2	0.3
10x10	10.0	10±0.5	10.3	10.3	11.0	0.7~1.3	4.5	0.3

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			50			
		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.	ESR	D x L	R.C.	ESR
10																		4x6	85	2.50
																		5x6	165	0.90
22												4x6	160	0.95	4x6	160	0.95	5x6	165	0.90
33												4x6	160	0.95	5x6	240	0.40			
47								4x6	160	0.95	5x6	240	0.40	5x6	240	0.40	6.3x6	195	0.70	
68						4x6	160	0.95	5x6	240	0.40	5x6	240	0.40	6.3x6	300	0.30			
100	4x6	160	0.95						5x6	240	0.40	6.3x6	300	0.30	6.3x6	300	0.30	6.3x7.7	350	0.40
150						5x6	240	0.40	6.3x6	300	0.30	6.3x7.7	600	0.20	6.3x7.7	600	0.20			
220	5x6	240	0.40	6.3x6	300	0.30	6.3x6	300	0.30	6.3x7.7	600	0.20						8x10	670	0.18
330	6.3x6	300	0.30	6.3x7.7	600	0.20	6.3x7.7	600	0.20						8x10	850	0.09	10x10	900	0.12
470	6.3x7.7	600	0.20	6.3x7.7	600	0.20						8x10	850	0.09						
560															10x10	1190	0.08			
680	6.3x7.7	600	0.20					8x10	850	0.09										
820												10x10	1190	0.08						
1000						8x10	850	0.09	10x10	1190	0.07									
1500	8x10	850	0.09	10x10	1190	0.08														
2200	10x10	1190	0.08																	