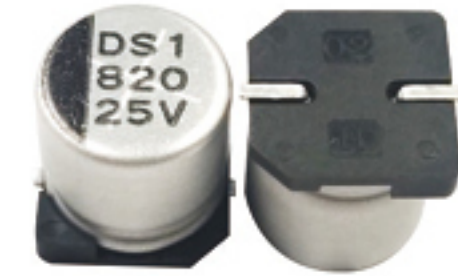


# CDS series

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



## 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°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 ≤ 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
	tan δ(Max)	0.26	0.19	0.16	0.14	0.12	0.10
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
	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 ±30% of Initial Value					
	tan δ	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 ±30% of Initial Value					
	tan δ	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 ± 10% of Initial Value	
					tan δ	Initial Specified Value	
					Leakage Current	Initial Specified Value or less	
Standards 參照標準	JIS C 5101-4-1 (IEC 60384)						

## Frequency Coefficient of Permissible Ripple Current

Frequency (Hz)	120 ≤ F < 1K	1K ≤ F < 10K	10K ≤ F < 100K	100K ≤ F
Capacitance (µF) ≤ 470	0.65	0.85	0.95	1.00
>470	0.70	0.90	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.

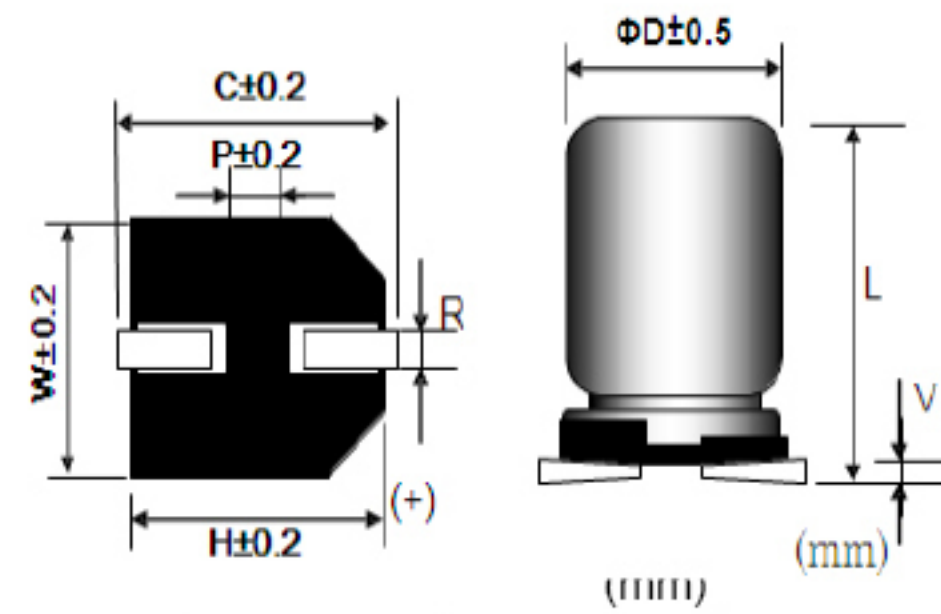
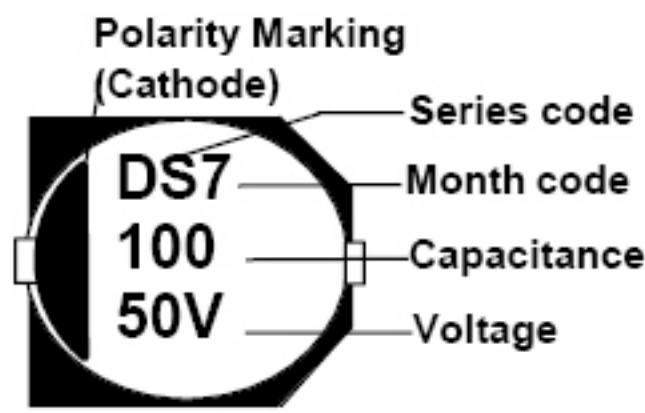


# CDS series

## DIMENSIONS(mm)

Chip Type

Fig.1  $\Phi D=6.3\sim 10\text{mm}$



Size	ØD	L	W	H	C	R	P	Vmax
4×6.0	4.0	6.0±0.3	4.3	4.3	5.1	0.5~0.8	1.0	0.3
5×6.0	5.0	6.0±0.3	5.3	5.3	5.9	0.5~0.8	1.4	0.3
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	0.7~1.3	4.5	0.3

## STANDARD RATINGS

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

Cap ( $\mu\text{F}$ )	V	6.3			10			16			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.	IMP	D x L	R.C.	IMP	D x L	R.C.
10																	4x6.0	85	2.50
																	5x6.0	165	0.90
22											4x6.0	160	0.95	4x6.0	160	0.95	5x6.0	165	0.90
33											4x6.0	160	0.95	5x6.0	240	0.40			
47								4x6.0	160	0.95	5x6.0	240	0.40	5x6.0	240	0.40	6.3x6.0	195	0.70
68					4x6.0	160	0.95	5x6.0	240	0.40	5x6.0	240	0.40	6.3x6.0	300	0.30			
100		4x6.0	160	0.95				5x6.0	240	0.40	6.3x6.0	300	0.30	6.3x6.0	300	0.30	6.3x7.7	350	0.40
150					5x6.0	240	0.40	6.3x6.0	300	0.30	6.3x7.7	600	0.20	6.3x7.7	600	0.20			
220		5x6.0	240	0.40	6.3x6.0	300	0.30	6.3x6.0	300	0.30	6.3x7.7	600	0.20				8x10	670	0.18
330		6.3x6.0	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															