

CS series

- Chip type operating over wide temperature range of to: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.
- RoHS Compliance.
- 85°C 薄片式產品。
- 專為高密度PC板表面貼裝而設計。
- 適合自動貼裝機使用。



CS

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	-40 ~ +85°C								
Rated Voltage Range 工作電壓範圍	4 ~ 100V								
Rated Capacitance Range 適用容量範圍	0.1 ~ 1500μF								
Leakage Current 洩漏電流	I≤0.01CV or 3 (μA), which is greater. (After 2 minutes application of rated voltage)								
Dissipation Factor 散逸因素 (tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C								
	Rated Voltage (V)	4	6.3	10	16	25	35	50	63~100
	tan δ (Max)	0.42	0.28	0.24	0.20	0.14	0.12	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)	4	6.3	10	16	25	35	50	63~100
	Z (-25°C) / Z (20°C)	7	4	3	2	2	2	2	2
	Z (-40°C) / Z (20°C)	15	8	8	4	4	3	3	3
Load Life 負荷壽命	2000hours, with application of working voltage at 85°C								
	Capacitance Change	Within ±20% of Initial Value (within ±25% for 4V)							
	tan δ	200% or less of Initial Specified Value							
	Leakage Current	Initial Specified Value or less							
Shelf Life 放置壽命	1,000hours, no voltage applied, at 85°C. After Test : UR to be applied for 30 minutes, 24 to 48hours before measurement. They meet the specified value for endurance characteristics listed above.								
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								

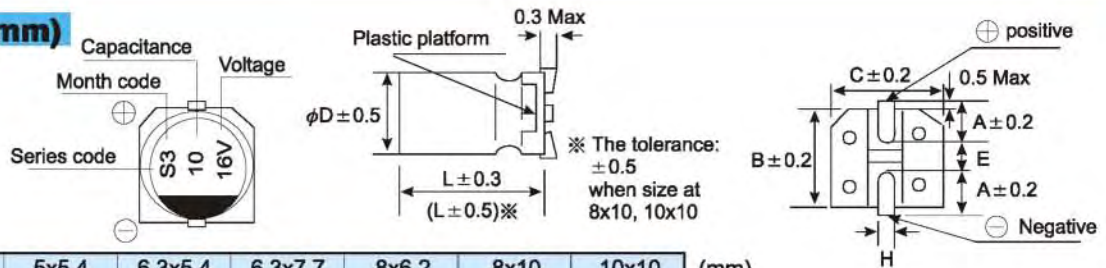
Frequency Coefficient of Permissible Ripple Current

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

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DIMENSIONS (mm)

■ Chip Type



$\phi D \times L$	4x5.4	5x5.4	6.3x5.4	6.3x7.7	8x6.2	8x10	10x10	(mm)
A	1.8	2.1	2.4	2.4	3.3	2.9	3.2	
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3	
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3	
E	1.0	1.3	2.2	2.2	2.3	3.1	4.5	
L	5.4	5.4	5.4	7.7	6.2	10	10	
H	0.5~0.8	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

DxL: (mm), R.C (mA rms) at 85°C, 120Hz.

Cap (μF)	WV(V) (Code)	4 (0G)		6.3 (0J)		10 (1A)		16 (1C)		25 (1E)	
		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.
4.7										4x5.4	16
10						4x5.4	28	4x5.4	23	4x5.4	23
22		4x5.4	28	4x5.4	28	5x5.4	33	5x5.4	37	5x5.4	34
33		4x5.4	28	4x5.4	28	5x5.4	41	5x5.4	49	6.3x5.4	47
47		4x5.4	33	5x5.4	45	5x5.4	52	6.3x5.4	58	6.3x5.4	57
56		5x5.4	42	6.3x5.4	52	6.3x5.4	57	6.3x5.4	63	6.3x5.4	62
100		5x5.4	56	6.3x5.4	65	6.3x5.4	76	6.3x5.4	86	6.3x7.7	130
150		6.3x5.4	79	6.3x5.4	71	6.3x7.7	130	6.3x7.7	130	8x6.2	200
220		6.3x5.4	96	6.3x5.4	105	6.3x7.7	130	6.3x7.7	130	8x6.2	200
330		6.3x7.7	130	6.3x7.7	130	8x6.2	200	8x10	250	8x10	360
470		6.3x7.7	130	8x6.2	200	8x10	250	8x10	250	10x10	400
680		8x10	250	8x10	280	8x10	280	10x10	280		
1000		8x10	300	8x10	300	10x10	350	10x10	350		
1500		10x10	430	10x10	430	10x10	430				

Cap (μF)	WV(V) (Code)	35 (1V)		50 (1H)		63 (1J)		100 (2A)	
		D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
0.1				4x5.4	3.0	4x5.4	2.0		
0.22				4x5.4	5.0	4x5.4	3.0		
0.33				4x5.4	6	4x5.4	4.0		
0.47				4x5.4	7.0	4x5.4	5.0		
1				4x5.4	10	4x5.4	8.0	4x5.4	6.0
2.2		4x5.4	12	4x5.4	14	5x5.4	12	5x5.4	10
3.3		4x5.4	16	4x5.4	19	5x5.4	17	8x6.2	40
4.7		4x5.4	18	4x5.4	26	5x5.4	23	8x6.2	40
10		5x5.4	29	5x5.4	31	6.3x5.4	42	8x6.2	40
22		6.3x5.4	46	6.3x5.4	59	6.3x7.7	60		
33		6.3x5.4	51	8x6.2	100	8x6.2	80	10x10	90
47		8x6.2	100	6.3x7.7	75	8x10	110	10x10	90
56		6.3x5.4	63	8x6.2	100	8x10	130		
100		8x6.2	100	8x6.2	100	8x10	130		
220		6.3x7.7	70	8x10	175	10x10	160		
330		8x10	175	8x10	175	10x10	170		