

CK series

- Standard type of V-chip, 2000 hours, 105°C.
- Applicable to SMT process.
- RoHS Compliance.
- 105°C 2000hours V-Chip型標準品。
- 適用於SMT製程。



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 ~ +105°C						
Rated Voltage Range 額定電壓範圍	6.3 ~ 50VDC						
Capacitance Range 靜電容量範圍	0.1 ~ 1000μF						
Leakage Current 洩漏電流	$I \leq 0.01CV$ or $3 (\mu A)$, 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)	0.32	0.28	0.24	0.18	0.15	0.14
Low Temperature Stability 低溫特性	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
Impedance Ratio(Max) 阻抗比率(最大值)	Z(-55°C)/Z(20°C)	8	8	4	4	3	3
	2000hours,with application of rated voltage at 105°C						
	Capacitance Change	Within $\pm 20\%$ of Initial Value					
Load Life 負荷壽命	tan δ	200% or less of Initial Specified Value					
	Leakage Current	Initial Specified Value or less					
	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.						
Shelf Life 放置壽命	Capacitance Change	Within $\pm 20\%$ 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 $\pm 10\%$ 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

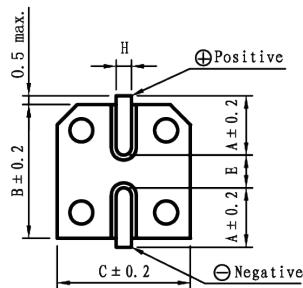
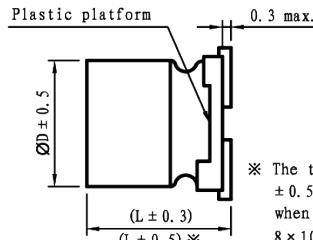
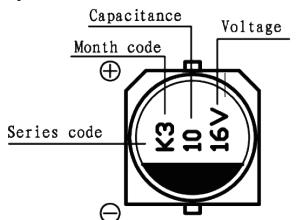
Frequency (Hz)	50	120	300	1K	$\geq 10K$
Coefficient	0.70	1.00	1.17	1.36	1.50

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



$\phi D \times L$	4x5.4	5x5.4	6.3x5.4	6.3x7.7	8x10	10x10	(mm)
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×L(mm); R.C.(mA rms) at 105°C 120Hz.

Cap (μ F)	V	6.3		10		16		25		35		50		
		Item	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.	D x L	R.C.
0.1													4x5.4	1.0
0.22													4x5.4	2.6
0.33													4x5.4	3.2
0.47													4x5.4	3.8
1													4x5.4	8
2.2									4x5.4	6.6	4x5.4	8	4x5.4	11
3.3						4x5.4	7	4x5.4	12	4x5.4	13	4x5.4	16	
4.7			4x5.4	7	4x5.4	9	4x5.4	13	4x5.4	15	5x5.4	19		
10	4x5.4	10	4x5.4	13	4x5.4	28	5x5.4	28	5x5.4	28	6.3x5.4	35		
22	4x5.4	26	5x5.4	35	5x5.4	39	6.3x5.4	45	6.3x5.4	70	6.3x7.7	65		
33	4x5.4	29	6.3x5.4	43	6.3x5.4	51	6.3x5.4	65	6.3x5.4	70	8x10	140		
47	5x5.4	45	6.3x5.4	62	6.3x5.4	70	6.3x5.4	70	6.3x7.7	80	6.3x7.7	170		
100	6.3x5.4	71	6.3x5.4	90	6.3x7.7	100	6.3x7.7	100	8x10	305	8x10	315		
220	6.3x7.7	100	6.3x7.7	120	6.3x7.7	125	8x10	355	10x10	450	10x10	450		
330			8x10	215	10x10	440	10x10	450						
470	10x10	310	10x10	440	10x10	460	10x10	490						
1000	10x10	495												