

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	± 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 ~ 100VDC							
Capacitance Range 靜電容量範圍	1 ~ 6800μF							
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 δ)	Measurement Frequency: 120Hz. Temperature: 20°C							
	Rated Voltage(V)	6.3	10	16	25	35	50	63~100
	tan δ(Max)	0.32	0.28	0.24	0.18	0.15	0.14	0.12
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	63~100
	Z(-25°C)/Z(20°C)	4	3	2	2	2	2	2
	Z(-55°C)/Z(20°C)	8	8	4	4	3	3	3
Load Life 負荷壽命	2000hours,with application of rated voltage at 105°C							
	Capacitance Change	Within ± 20% 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 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.							
	Capacitance Change	Within ± 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.				Capacitance Change	Within ± 10% of Initial Value		
	After removing from the hot plate and restored at room temperature they meet the characteristics requirements listed at right.				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	≥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.

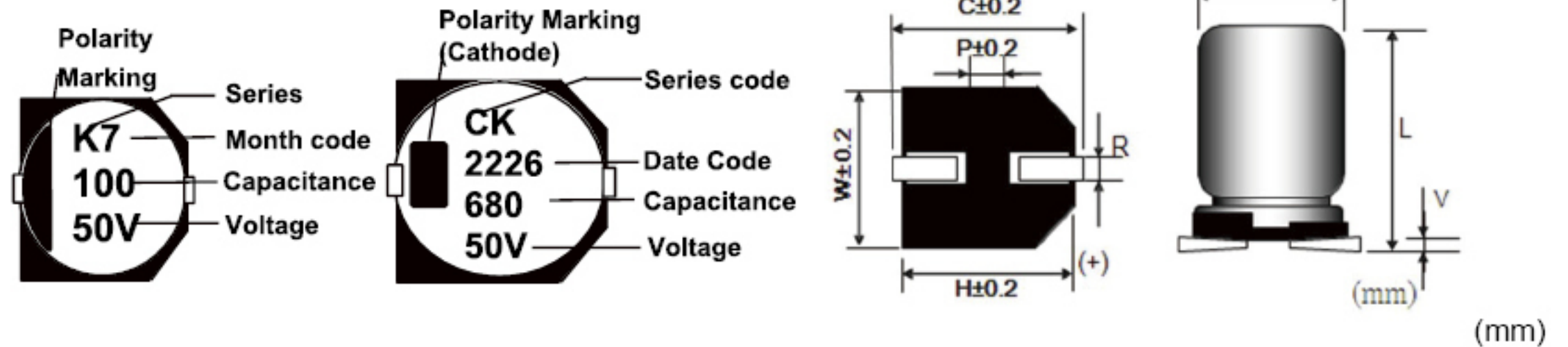
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DIMENSIONS(mm)

Chip Type

Fig.1 $\Phi D=4\sim 10\text{mm}$ Fig.2 $\Phi D\geq 12.5\text{mm}$



$\phi D \times L$	4x5.4	5x5.4	6.3x5.4	6.3x7.7	8x6.5	8x10	10x10	12.5x13.5	16x16.5	16x21.5	18x16.5	18x21.5
ΦD	4.0	5.0	6.3	6.3	8.0	8.0	10	12.5	16	16	18	18
L	5.4 \pm 0.3	5.4 \pm 0.3	5.4 \pm 0.3	7.7 \pm 0.3	6.5 \pm 0.5	10 \pm 0.5	10 \pm 0.5	13.5 \pm 0.5	16.5 \pm 0.5	21.5 \pm 0.5	16.5 \pm 0.5	21.5 \pm 0.5
W	4.3	5.3	6.6	6.6	8.3	8.3	10.3	13.0	17.0	17.0	19.0	19.0
H	4.3	5.3	6.6	6.6	8.3	8.3	10.3	13.0	17.0	17.0	19.0	19.0
C	5.1	5.9	7.2	7.2	9.0	9.0	11.0	13.7	18.0	18	20.0	20.0
R	0.5~0.8	0.5~0.8	0.5~0.8	0.5~0.8	0.7~1.1	0.7~1.1	0.7~1.3	1.1~1.4	1.4~1.8	1.4~1.8	1.4~1.8	1.4~1.8
P	1.0	1.4	2.1	2.1	2.3	3.2	4.5	4.5	6.4	6.4	6.4	6.4
Vmax	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4

STANDARD RATINGS

DxL(mm) ; R.C.(mA rms) at 105°C 120Hz.

Cap (μF)	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.
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	8x10	170
100		6.3x5.4	71	6.3x5.4	90	6.3x7.7	100	6.3x7.7	220	8x10	305	8x10	315
220		6.3x7.7	100	6.3x7.7	120	6.3x7.7	125	8x10	300	10x10	450	10x10	450
330		8x10	215	8x10	215	10x10	440	10x10	450			12.5x13.5	490
470		10x10	310	10x10	440	10x10	460	10x10	490	12.5x13.5	520		
1000		10x10	495	10x10	440	12.5x13.5	500	12.5x13.5	520	16x16.5	800	18x16.5	990
2200		12.5x13.5	680	12.5x13.5	680	16x16.5	900	16x16.5	900	18x16.5	1050		
3300				16x16.5	950	16x16.5	950	16x21.5	1200				
4700		16x16.5	1000	16x16.5	1000	18x16.5	1225	18x21.5	1300				
6800		18x16.5	1290	18x16.5	1290								
8200		18x21.5	1450	18x21.5	1450								