

HK

Wide temperature Standard

宽温标准品

- Standard type of V-chip, 2000 hours, 105°C.
- Applicable to SMT process.
- RoHS Compliance.
- 105°C 2000hours V-Chip 型标准品。
- 适用于SMT制程。



## ■ Specifications 特性表

Items 项目	Characteristics 特性						
Capacitance Tolerance 静电容量误差	$\pm 20\%$ (120Hz,20°C)						
Operating Temperature Range 适用温度范围	-55 ~ +105°C						
Rated Voltage Range 额定电压范围	6.3 ~ 50VDC						
Capacitance Range 静电容量范围	0.1 ~ 1000μF						
Leakage Current 漏电流	$I \leq 0.01CV$ or 3 ( $\mu$ A) , which is greater. ( After 2 minutes application of DC rated voltage, at 20°C)						
Dissipation Factor 损失角正切值 ( 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 低温特性	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(-55°C)/Z(20°C)	8	8	4	4	3	3
Load Life 负荷寿命	2000hours,with application of rated voltage at 105°C						
	Capacitance Change	Within $\pm 20\%$ of Initial Value					
	tan δ	200% or less of Initial Specified Value					
	Leakage Current	Initial Specified Value or less					
Shelf Life 放置寿命	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 $\pm 20\%$ of Initial Value					
	tan δ	200% or less of Initial Specified Value					
	Leakage Current	Initial Specified Value or less					
Resistance to Soldering Heat 焊锡耐热性	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 标识	Black print on the case top						

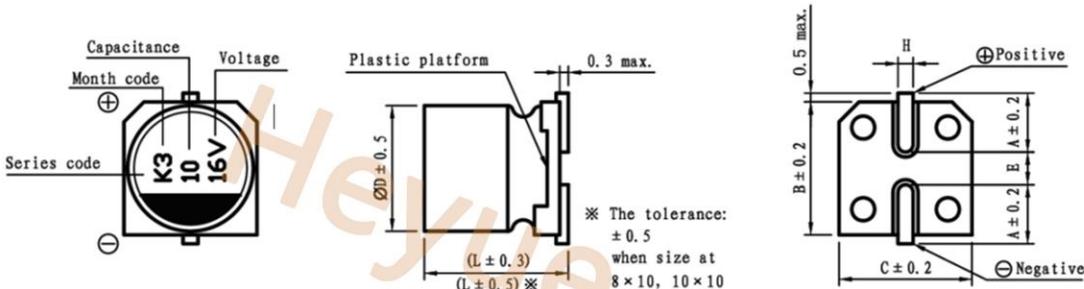
### Frequency Coefficient of Permissible Ripple Current

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.

**注:**以上所提供的设计及特性参数仅供参考,任何修改不作预先通知,如有使用上任何疑问,请在采购前与我们联系,以便提供技术上的协助。

## ■ DIMENSIONS(mm) 外形图



$\phi D \times L$	4x5.4	5x5.4	6.3x5.4	6.3x7.7	8x10	10x10
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 标准品一览表

DxL(mm); R.C.(mA rms) at 105°C 120Hz.

Cap ( $\mu$ 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	8x10	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												

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