

**HKL** Long life  
长寿命品

- 105°C 5000 hours Long Life.
- Applicable to SMT process.
- RoHS Compliance.
- 105°C 5000hour长寿命品。
- 适用于LED驱动及长寿命要求产品



## ■ 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	-40 ~ +105°C						
Rated Voltage Range 额定电压范围	6.3 ~ 50VDC						
Capacitance Range 静电容量范围	22 ~ 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 损耗角正切值 ( tan δ )	Measurement Frequency: 120Hz. Temperature: 20°C						
	Rated Voltage(V)	6.3	10	16	25	35	50
	tan δ(Max)	32	28	22	16	13	12
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(-40°C)/Z(20°C)	10	7	5	3	3	3
Load Life 负荷寿命	5000hours,with application of rated voltage at 105°C						
	Capacitance Change	Within $\pm 30\%$ of Initial Value					
	tan δ	300% 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 $\pm 300\%$ of Initial Value					
	tan δ	300% 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	
Standards 参照标准	JIS C 5101-4-1 (IEC 60384)						

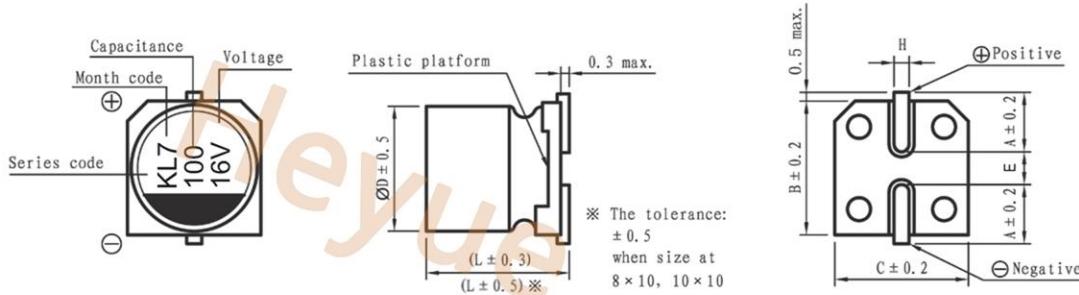
### Frequency Coefficient of Permissible Ripple Current

Frequency (Hz)	$100 \leq F < 1K$	$1K \leq F < 10K$	$10K \leq F < 100K$	$100K \leq F$
Capacitance ( $\mu F$ )				
4.7 ~ 33	1.00	1.20	1.30	1.45
>33	1.00	1.10	1.20	1.30

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



$\phi D \times L$	8x10	10x10
A	2.9	3.2
B	8.3	10.3
C	8.3	10.3
E	3.1	4.5
L	10	10
H	0.8~1.1	0.8~1.1

## ■ Standard ratings 标准品一览表

D×L(mm); R.C.(mA rms) at 105°C 120Hz.

Cap (μF)	V	6.3		10		16		25		35		50		
		Item	D × L	R.C.	D × L	R.C.	D × L	R.C.	D × L	R.C.	D × L	R.C.	D × L	R.C.
22														
33													8x10	80
47													8x10	95
100									8x10	116	10x10	150	10x10	160
220				8x10	140	10x10	216	10x10	240	10x10	280			
330	8x10	160	10x10	240	10x10	300	10x10	375						
470	10x10	260	10x10	280	10x10	320								
1000	10x10	340												

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