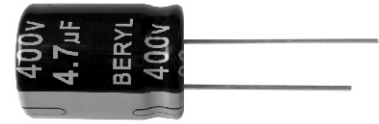


HK Series

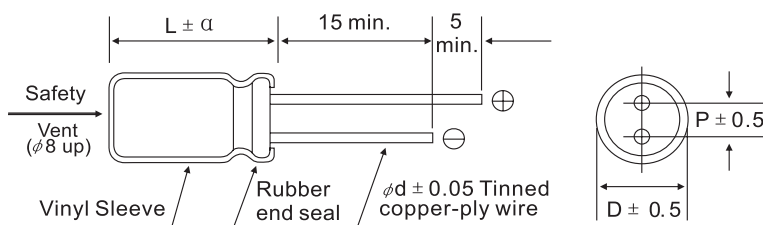
- Endurance with ripple current : 105°C 15,000 to 20,000 hours
- For LED Lighting Ultra Long Life
- RoHS Compliant



■ 規格表 SPECIFICATIONS

項目 Items	特性參數 Characteristics			
使用溫度範圍 Category Temperature Range	-40 ~ +105°C(160 ~ 400V)		-25 ~ +105°C(450V)	
額定工作電壓範圍 Rated Voltage Range	160 ~ 450V			
靜電容量允許偏差 Capacitance Tolerance	±20%(M) (at 20°C,120Hz)			
漏電流 Leakage Current	Time	After 1minute 1分鐘讀數	After 5minute 5分鐘讀數	
	CV	$I \leq 0.1CV + 40$	$I \leq 0.03CV + 15$	
	$Cv \leq 1000$	$I \leq 0.04CV + 100$	$I \leq 0.02CV + 25$	
	$CV > 1000$	Note: I=Max.leakage current (uA), C=Nominal capacitance(uF), V=Rated voltage(V) (at 20°C)		
損耗角正切值 $\tan \delta$ Dissipation Factor	Rated voltage(V)	160~250	450	(at 20°C,120Hz)
	$\tan \delta$ (Max)	0.2	0.24	
低溫特性 Low Temperature Characteristics (Max.Impedance Ratio)	電容器的低溫阻抗比值，不應超過下表所列出的值			
	Rated voltage(V)	160~250	400	450
	Z(-25°C)/Z(+20°C)	3	6	6
	Z(-40°C)/Z(+20°C)	8	10	-
耐久性 Endurance	施加額定工作電壓和最大允許紋波電流(Φ6.3~8為12000小時、Φ10為15000小時)，經恢復20°C後測試產品性能應滿足以下要求 The following specifications shall be satisfied when the capacitors are restored at 20°C after exposing them (12,000 hours for Φ6.3~8、15,000 hours for Φ10) with voltage and the rated ripple current is applied.			
	Capacitance change	$\cong \pm 20\%$ of the initial value		
	D.F.($\tan \delta$)	$\cong 200\%$ of the specified value		
	Leakage current	\cong The specified value		
高溫儲存特性 Shelf Life	105°C放置1000小時，經恢復20°C後測試產品性能應滿足以下要求 The following specifications shall be satisfied when the capacitors are restored at 20°C after exposing them " for 1000 hours at 105C without voltage applied."			
	Capacitance change	$\cong \pm 20\%$ of the initial value		
	D.F.($\tan \delta$)	$\cong 200\%$ of the specified value		
	Leakage current	$\cong 500\%$ of the specified value		

■ 外形圖 DIMENSIONS (mm)



ΦD	10	13	16	18
P	5.0	5.0	7.5	7.5
Φd	0.6	0.6	0.8	0.8

α	(L<20)1.5
	(L≥20)2.0

■ 紋波電流補正係數 RATED RIPPLE CURRENT COEFFICIENT

- 頻率係數 Frequency Coefficient
160V~400V.DC

Frequency(Hz)	120	1K	10K	100K
Capacitance(µF)				
1~5.6	1.00	1.30	1.80	2.00
6.8~18	1.00	1.50	1.70	1.90
22~33	1.00	1.40	1.60	1.80

- 450V.DC

Frequency(Hz)	120	1K	10K	100K
Capacitance(µF)				
4.7~15	0.3	0.6	0.9	1.0
22~68	0.4	0.7	0.9	1.0

HK Series

■ 尺寸與最大紋波電流一覽表 STANDARD RATINGS

WV(V) Cap(μF)	160(2C)			200(2D)			250(2E)			400(2G)			450(2W)		
	1										6.3 × 12	24	48		
2.2				6.3 × 12	36	72	6.3 × 12	36	72	8 × 12	40	80			
3.3				6.3 × 12	42	84				8 × 12	47	94			
3.9										10 × 13	57	114			
4.7				6.3 × 12	49	98	8 × 12	53	106	10 × 13	61	122	10 × 16	54	180
5.6	6.3 × 12	52	104				8 × 12	62	124						
6.8							8 × 12	68	129	10 × 16	85	181	10 × 20	84	280
8.2							10 × 13	76	144				10 × 20	84	280
10				8 × 12	80	152	10 × 13	90	171				13 × 20	135	450
12							10 × 13	97	184						
15	8 × 12	92	174										13 × 25	180	600
18				10 × 13	113	214	10 × 16	127	241						
22	10 × 13	121	217										13 × 25	240	600
27				10 × 16	149	268									
33	10 × 16	158	284										16 × 26	392	980
47													18 × 26	480	1,200
68													18 × 32	520	1,300

↑ Rated ripple current : (mArms) at 105°C,100KHz
 ↑ Rated ripple current : (mArms) at 105°C,120Hz
 ↑ Case size : ΦD×L(mm)