

# HKF 系列 Series

## 特点 Features

- 5mm高度, 105°C。5mmL, 105°C .
- 适用于移动通讯、袖珍对讲机、汽车音响等电路。
- Used in locomotive communication, pocked intercom telephone and car audio circuits, etc.
- RoHS指令已对应完毕。Adapted to the RoHS directive.



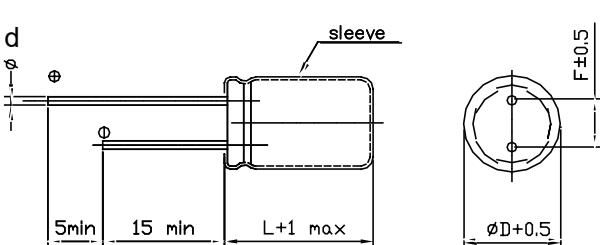
## 主要技术性能 Specifications

项目 Items	特性 Performance Characteristics							
使用温度范围 Operating Temperature Range	-40~+105°C							
额定电压范围 Rated Voltage Range	4~50V							
标称电容量范围 Nominal Capacitance Range	0.1~220μF							
标称电容量允许偏差 Capacitance Tolerance	±20% (120Hz, +20°C)							
漏电流 Leakage Current	$I \leq 0.01CV$ or 3(μA) 2分钟(at 20°C, after 2 minutes) 取最大者(whichever is greater)							
损耗角正切值 (tgδ) Dissipation Factor (+20°C, 120Hz)	$U_R$ (V)	4	6.3	10	16	25	35	50
	tgδ	0.35	0.24	0.20	0.16	0.14	0.12	0.10
温度特性Temperature Characteristics (Impedance ratio at 120Hz)	$U_R$ (V)	4	6.3	10	16	25	35	50
	Z-25°C / Z+20°C	7	4	3	2	2	2	2
	Z-40°C / Z+20°C	15	10	8	6	4	3	3
耐久性 Load Life	<p>+105°C加额定电压1000小时, 恢复16小时后: After applying rated voltage for 1000 hours at +105°C and then resumed for 16 hours:</p> <p>电容量变化率 Capacitance change : <math>\pm 25\%</math>初始测量值以内 <math>\pm 25\%</math> of the initial measured value (4V:<math>\pm 30\%</math>)</p> <p>漏 电 流 Leakage current : <math>\leq</math>初始规定值 <math>\leq</math>the initial specified value</p> <p>损耗角正切值 Dissipation factor : <math>\leq 2</math>倍初始规定值 <math>\leq 2</math>times of the initial specified value</p>							
高温贮存 Shelf Life	<p>+105°C, 1000小时贮存后, 恢复16小时后: After storage for 1000 hours at +105°C and then resumed for 16 hours:</p> <p>电容量变化率 Capacitance change : <math>\pm 25\%</math>初始测量值以内 <math>\pm 25\%</math> of the initial measured value (4V:<math>\pm 30\%</math>)</p> <p>漏 电 流 Leakage current : <math>\leq 2</math>倍初始规定值 <math>\leq 2</math>times of the initial specified value</p> <p>损耗角正切值 Dissipation factor : <math>\leq 2</math>倍初始规定值 <math>\leq 2</math>times of the initial specified value</p>							

## 频率修正系数 Frequency Coefficient

CAP(uF)	F(Hz)	60	120	1K	≥10K
0.1~68	0.8	1	1.3	1.5	
100~220	0.8	1	1.15	1.2	

## 外形图及尺寸表 CasesSizizeetble



单位 Unit: mm				
D	4	5	6.3	8
F	1.5	2.0	2.5	3.5
d	0.45			

## 尺寸 Dimensions

WV		4V(0G)		6.3V(0J)		10V(1A)		16V(1C)		25V(1E)		35V(1V)		50V(1H)				
		CAP(μF)	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple		
0.1	0R1														4×5	1.0		
0.22	R22														4×5	2.6		
0.33	R33														4×5	3.2		
0.47	R47														4×5	3.8		
1	010														4×5	6.2		
2.2	2R2														4×5	11		
3.3	3R3														4×5	14		
4.7	4R7												4×5	13	4×5	15	5×5	19
10	100			4×5	13	4×5	15	4×5	18	5×5	23	5×5	25	6.3×5	30			
22	220	4×5	22	4×5	22	5×5	27	5×5	30	6.3×5	38	6.3×5	48	8×5	60			
33	330	5×5	30	5×5	30	5×5	35	6.3×5	40	6.3×5	48							
47	470	5×5	36	5×5	36	6.3×5	46	6.3×5	50	6.3×5	55							
100	101	6.3×5	60	6.3×5	60	6.3×5	65	6.3×5	75	8×5	80							
220	221	8×5	100	8×5	110	8×5	120											

Size φD×L(mm)

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz