

# HPF

## 导电性高分子固体铝电解电容器(长寿命品) -引线型 Conductive polymer solid aluminum electrolytic capacitor (Long life Type)- Radial type

### 特点 Features

- 长寿命。  
 Long life.
- 可适于无铅焊。  
 Lead free-flow is supported.
- 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 Characteristics			
工作温度范围 Operating Temperature Range	-55~+105°C			
额定电压范围 Rated Voltage Range	2.5~25V			
标称容量范围 Nominal Capacitance Range	220~2200μF			
标称容量允许偏差 Nominal Capacitance Tolerance	±20%(20°C, 120Hz)			
漏电流 Leakage Current	参照规格表 Reference parameter table 2分钟 at 20°C, after 2 minutes			
损耗角正切(tgδ) Dissipation Factor (Max)	20°C, 120Hz	直径 tgδ	Φ6.3~Φ10 0.08	
等效串联电阻 ESR	参照规格表 Reference parameter table (mΩ at 100k~300kHz 20°C max)			
高低温特性比 Characteristics of impedance ratio at high temp. and low temp	要求在100KHZ 20°C Based the value at 100KHZ. +20°C	-55°C +105°C	Z/Z20°C Z/Z20°C	0.75 to 1.25 0.75 to 1.25
耐久性 Load Life	+105°C施加额定电压5000小时后, 待温度恢复到20°C后进行测试, 电容器应满足以下要求: After 5000 hours' application of rated voltage at 105°C, and then being stabilized at +20°C, the capacitors shall meet the following requirement:			
	容量变化率 Capacitance Change	±20%初始值以内 Within ±20% of the initial value (16V: within ±25% of the initial value)		
	损耗角正切 Dissipation Factor	≤ 150%初始规定值 Not more than 150% of the initial specified value		
	阻抗 Equivalent Series Resistance	≤ 150%初始规定值 Not more than 150% of the initial specified value		
	漏电流 Leakage Current	≤ 初始规定值 Not more than the initial specified value		
稳态湿热 Damp heat(Steady state)	60°C, 90~95% RH, 不加电压1000小时 60°C, 90~95% RH, 1000 hours, No-applied voltage.			
	容量变化率 Capacitance Change	±20%初始值以内 Within ±20% of the initial value (16V: within ±25% of the initial value)		
	损耗角正切 Dissipation Factor	≤ 150%初始规定值 Not more than 150% of the initial specified value		
	阻抗 Equivalent Series Resistance	≤ 150%初始规定值 Not more than 150% of the initial specified value		
	漏电流 Leakage Current	≤ 初始规定值 Not more than the initial specified value		
耐焊接热 Resistance to Soldering Heat	(VPS)(260°C X 10s)			
	容量变化率 Capacitance Change	±10%初始值以内 Within ±10% of the initial value (16V以上: within ±15% of the initial value)		
	损耗角正切 Dissipation Factor	≤ 初始规定值 Not more than the initial specified value		
	阻抗 Equivalent Series Resistance	≤ 初始规定值 Not more than the initial specified value		
	漏电流 Leakage Current	≤ 初始规定值 Not more than the initial specified value		

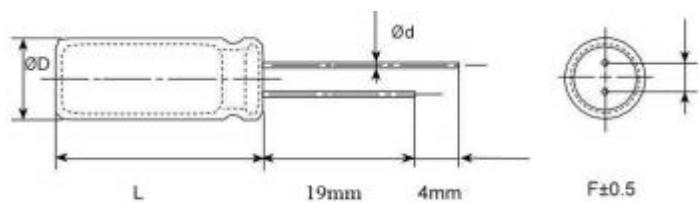
※ 当产生疑问的时候, 用以下电压处理后测定。

电压处理: 125°C下, 连续加载120 分钟电压。加载电压为额定电压。

When in doubt, apply the following voltage treatment and measure.

Voltage processing: under the condition of 125 °C ambient temperature, continuous load voltage of 120 minutes. Load voltage is rated voltage.

尺寸图 Dimensions



尺寸表 Size List

单位 Unit: mm

D(+0.5max)	6.3	8	10
F(±0.5)	2.5	3.5	5
d(±0.05)	0.6	0.6	0.6
L	+1max		

标称电容量、额定电压、额定纹波电流与尺寸对应表  
Nominal Capacitance, Rated Voltage, Rated Ripple Current and Case Size Table

Rated Volt. (V)	Capacitance (uF)	Size ΦD×L(mm)	Tanδ (120HZ,20°C)	LC (μA)	ESR (mΩ/at 100k~300kHz 20°C max)	Rated R. C. (mA/rms at 100kHz, 105°C)
2.5	470	6.3×8	0.08	235	7	5400
	560	6.3×8	0.08	280	7	5400
	560	8×8	0.08	280	7	6100
	820	6.3×8	0.08	410	7	5400
	820	8×8	0.08	410	7	6100
	1000	8×8	0.08	500	7	6100
	1000	8×11.5	0.08	500	7	6100
	1000	10×12	0.08	500	7	6100
	1200	8×8	0.08	600	7	6100
	1200	8×11.5	0.08	600	7	6100
	1200	10×12	0.08	600	7	6100
	1500	10×12	0.08	750	7	6100
	2200	10×12	0.08	1100	7	6100
4	470	6.3×8	0.08	376	7	5400
	470	8×8	0.08	376	7	6100
	560	6.3×8	0.08	448	7	5400
	560	8×8	0.08	448	7	6100
	820	8×8	0.08	656	7	6100
	1000	8×8	0.08	800	7	6100
	1200	8×12	0.08	960	7	6100
	1500	10×12	0.08	1200	7	6100
6.3	470	6.3×8	0.08	592	8	4700
	560	6.3×8	0.08	706	8	4700
	560	8×8	0.08	706	8	5700
	820	8×8	0.08	1033	8	5700
	820	8×11.5	0.08	1033	8	5700
	1000	8×11.5	0.08	1260	8	6100
	1500	10×12	0.08	1890	8	6100
10	330	8×8	0.08	660	10	4700
	390	8×11.5	0.08	780	10	5400
	470	8×11.5	0.08	940	10	5400
	560	10×12	0.08	1120	10	5400
	680	10×12	0.08	1360	10	5400
	1000	10×12	0.08	2000	10	5400

Rated Volt. (V)	Capacitance ( $\mu$ F)	Size $\Phi$ D×L(mm)	Tan $\delta$ (120HZ,20°C)	LC ( $\mu$ A)	ESR (m $\Omega$ /at 100k~300kHz 20°C max)	Rated R. C. (mA/rms at 100kHz, 105°C)
16	220	6.3×8	0.08	704	10	4700
	270	8×8	0.08	864	10	5100
	270	8×11.5	0.08	864	10	5100
	330	8×8	0.08	1056	10	5100
	330	8×11.5	0.08	1056	10	5100
	390	8×11.5	0.08	1248	10	5100
	470	8×11.5	0.08	1504	10	5100
	560	10×12	0.08	1792	10	5400
	680	10×12	0.08	2176	10	5400
20	220	8×8	0.08	880	25	3300
	270	8×11.5	0.08	1080	25	3900
	330	10×12	0.08	1320	25	3900
	470	10×12	0.08	1880	25	3900
25	100	8×11.5	0.08	500	25	3900
	220	10×12	0.08	1100	25	3900
	270	10×12	0.08	1350	25	3900