

# HPV

导电性高分子固体铝电解电容器(标准品) -贴片型  
Conductive polymer solid aluminum electrolytic capacitor (standard product)- SMD type

## 特点 Features

- 适用于表面贴装。 Use for surface mounted type.
- 适用于无铅回流焊。 The product can support lead free-reflow .
- 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	22~2700µF					
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	Φ5 0.10	Φ6.3(L≤7) 0.10	Φ6.3(L>7) 0.08	Φ8~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2000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 2000 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。

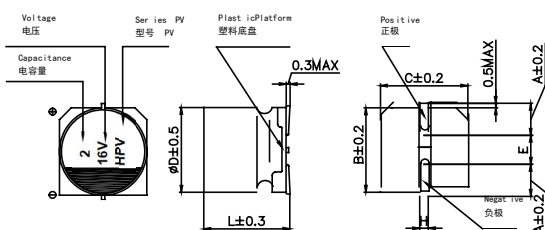
电压处理: 125°C下, 连续加载120 分钟的电压。加载电压为额定电压。

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

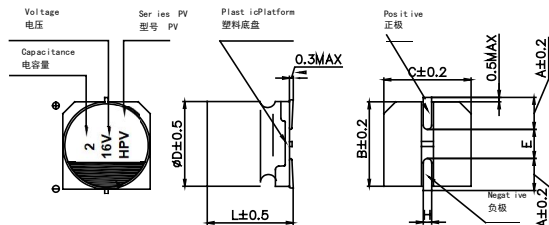
Voltage processing: under the condition of 125 °C ambient temperature, continuous load voltage of 120 minutes. Load voltage is rated voltage.

## 尺寸图 Dimensions

Φ5 ~ Φ6.3



Φ8 ~ Φ10



**尺寸表 Size List**

单位 Unit: mm

	5×5.8	6.3×5.8	6.3×7.7	8×10.5	8×12.5	10×10.5	10×12.5
A	2.1	2.4	2.4	2.9	2.9	3.2	3.2
B	5.3	6.6	6.6	8.3	8.3	10.3	10.3
C	5.3	6.6	6.6	8.3	8.3	10.3	10.3
E	1.3	2.2	2.2	3.1	3.1	4.5	4.5
L	5.8	5.8	7.7	10.5	12.5	10.5	12.5
H	0.5~0.8			0.8~1.1			

**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 (uA)	ESR (mΩ/at 100k~300kHz 20°C max)	Rated R. C. (mA/rms at 100kHz, 105°C)
2.5	180	5×5.8	0.1	300	30	2100
	220	6.3×5.8	0.1	300	25	2500
	270	6.3×5.8	0.1	300	25	2500
	330	6.3×5.8	0.1	300	25	2700
	390	6.3×5.8	0.1	300	25	2700
	470	6.3×7.7	0.1	300	20	3700
	560	6.3×7.7	0.1	300	20	3700
	680	8×10.5	0.08	340	15	4100
	820	8×10.5	0.08	410	15	4100
	1000	8×10.5	0.08	500	15	4100
	1200	8×12.5	0.08	600	12	4300
	1500	8×12.5	0.08	750	12	4300
	2200	10×10.5	0.08	1100	12	4700
	2700	10×12.5	0.08	1350	12	4700
4	100	5×5.8	0.1	300	30	1800
	150	5×5.8	0.1	300	30	1800
	220	6.3×5.8	0.1	300	25	2500
	270	6.3×5.8	0.1	300	25	2500
	330	6.3×5.8	0.1	300	25	2600
	390	6.3×5.8	0.1	312	25	2600
	470	6.3×7.7	0.1	376	20	3100
	560	6.3×7.7	0.1	448	20	3100
	680	8×10.5	0.08	544	15	4100
	820	8×10.5	0.08	656	15	4100
	1000	8×10.5	0.08	800	15	4100
	1200	8×12.5	0.08	960	12	4700
	1500	8×12.5	0.08	1200	12	4700
	2200	10×10.5	0.08	1760	12	5400
2700	10×12.5	0.08	2160	12	5400	
6.3	100	5×5.8	0.1	300	30	1500
	100	6.3×5.8	0.1	300	25	2400
	120	5×5.8	0.1	300	30	1500
	120	6.3×7.7	0.1	300	20	2600
	150	6.3×5.8	0.1	300	25	2400
	220	6.3×5.8	0.1	300	25	2400
	220	6.3×7.7	0.1	300	20	2600
	330	6.3×7.7	0.1	415	20	2600
	470	6.3×7.7	0.1	592	20	2600
	680	8×10.5	0.08	856	15	4100
	820	8×10.5	0.08	1033	15	4100
	1000	8×10.5	0.08	1260	15	4100
	1200	8×12.5	0.08	1512	12	4700

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)
6.3	1500	8×12.5	0.08	1890	12	4700
	2200	10×10.5	0.08	2772	12	5400
	2700	10×12.5	0.08	3400	12	5400
10	47	5×5.8	0.1	300	40	1300
	56	5×5.8	0.1	300	40	1300
	56	6.3×5.8	0.1	300	30	2100
	68	6.3×5.8	0.1	300	30	2100
	120	6.3×5.8	0.1	300	30	2100
	150	6.3×7.7	0.1	300	25	2500
	220	6.3×7.7	0.1	440	25	2500
	270	6.3×7.7	0.1	540	25	2500
	470	8×10.5	0.08	940	20	3700
	560	8×10.5	0.08	1120	20	3700
	680	8×10.5	0.08	1360	20	3700
	820	8×12.5	0.08	1640	15	4300
	1000	8×12.5	0.08	2000	15	4300
	1200	10×10.5	0.08	2400	15	5200
	1500	10×12.5	0.08	3000	15	5200
16	22	5×5.8	0.1	300	45	1200
	33	5×5.8	0.1	300	45	1200
	39	5×5.8	0.1	300	45	1200
	39	6.3×5.8	0.1	300	40	1600
	47	6.3×5.8	0.1	300	40	1600
	68	6.3×5.8	0.1	300	40	1600
	82	6.3×5.8	0.1	300	40	1600
	100	6.3×5.8	0.1	320	40	1600
	100	6.3×7.7	0.1	320	35	2300
	150	6.3×7.7	0.1	480	35	2300
	330	8×10.5	0.08	1056	30	3700
	470	8×10.5	0.08	1504	30	3700
	560	8×10.5	0.08	1792	30	3700
	680	8×12.5	0.08	2176	25	4100
	820	10×10.5	0.08	2624	25	5100
1000	10×12.5	0.08	3200	20	5100	
20	22	6.3×5.8	0.1	300	50	1600
	47	6.3×5.8	0.1	300	50	1600
	56	6.3×5.8	0.1	300	50	1600
	100	6.3×7.7	0.1	400	45	1800
	120	6.3×7.7	0.1	480	45	1800
	220	8×10.5	0.08	880	30	3100
	270	8×10.5	0.08	1080	30	3100
	330	8×10.5	0.08	1320	30	3100
	390	8×10.5	0.08	1560	30	3100
	470	8×12.5	0.08	1880	25	3700
	680	10×10.5	0.08	2720	25	4300
	820	10×12.5	0.08	3280	25	4300
25	47	6.3×5.8	0.1	300	60	1200
	56	6.3×5.8	0.1	300	60	1200
	56	6.3×7.7	0.1	300	50	1500
	82	6.3×7.7	0.1	410	50	1500
	150	8×10.5	0.08	750	35	2900
	220	8×10.5	0.08	1100	35	2900
	270	8×12.5	0.08	1350	30	3100
	330	10×10.5	0.08	1650	30	3800
	470	10×12.5	0.08	2350	30	3800