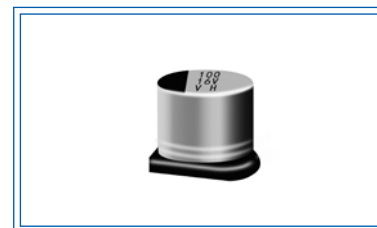


**VH** 片式铝电解电容  
SMD Aluminum Electrolytic Capacitors

- 产品直径。Case diameter: Φ4mm-Φ10mm.
- 适用于再流焊。Reflow soldering is available.
- 适用于高密度表面组装。Available for high density surface mounting.
- RoHS 指令已对应完毕。Adapted to the RoHS directive.

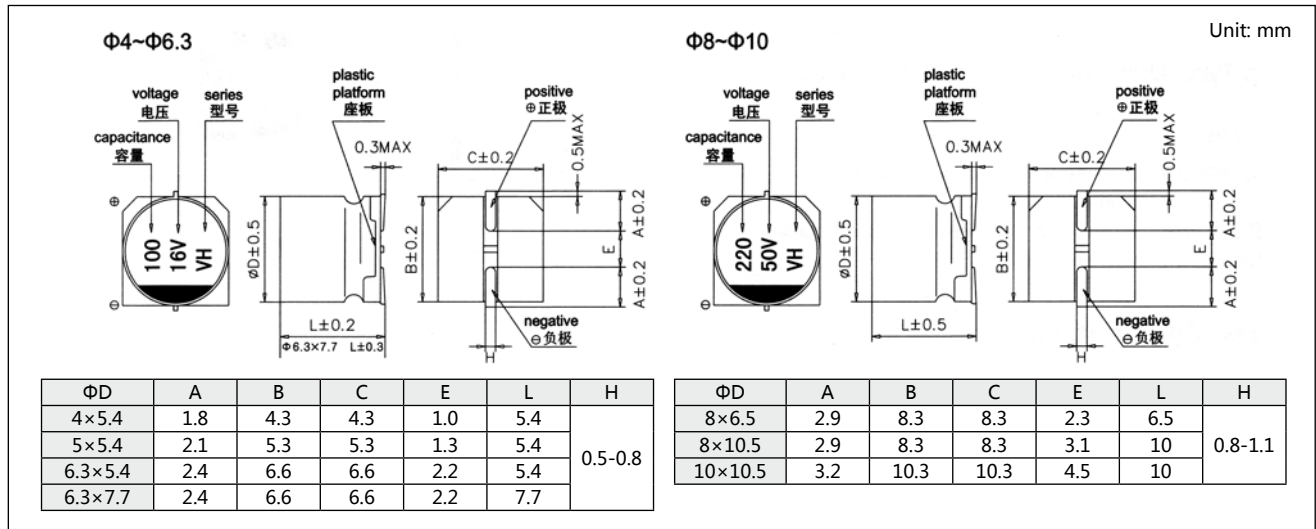


Surface Mount

**主要技术性能 Specifications**

项目 Item	特性 Performance Characteristics							
工作温度范围 Operating Temperature Range	-55°C ~ +105°C							
额定电压范围 Rated Voltage Range	4~50V							
标称容量范围 Nominal Capacitance Range	0.1~1000μF							
标称容量允许偏差 Capacitance Tolerance	±20%(+20°C, 120Hz)							
漏电流 Leakage Current	I ≤ 0.01C <sub>R</sub> U <sub>R</sub> or 3(μA), 取较大者 ( 2 分钟 ) Whichever is greater (at 20°C , after 2 minutes) C <sub>R</sub> : 标称容量 Nominal capacitance(μF), U <sub>R</sub> : 额定电压 Rated voltage(V)							
损耗角正切值 ( tgδ ) Dissipation Factor (Max) ( +20°C ,120Hz )	U <sub>R</sub> (V)	4	6.3	10	16	25	35	50
	tgδ	0.40	0.30	0.24	0.20	0.16	0.14	0.14
耐久性 Load Life	+105°C施加额定电压 2000 小时后, 电容器应满足以下要求: After 2000 hours' application of rated voltage at 105°C, the capacitor shall meet the following requirement:							
	电容量变化率 Capacitance change	±20% 初始测量值以内 ( ≤ 16V: ±25% 初始测量值以内 ) Within ±20% of the initial value( ≤ 16V: within ±25% of the initial value)						
	损耗角正切 Dissipation factor	≤ 200% 初始规定值 Not more than 200% of the initial specified value						
高温贮存 Shelf Life	+105°C 贮存 1000 小时后, 电容器应满足以上耐久性要求。 After storage for 1000 hours at 105°C, the capacitors shall meet the requirement of load life above.							
	低温特性 Low Temperature Stability 阻抗比 Impedance Ratio(120Hz)	U <sub>R</sub> (V)	4	6.3	10	16	25	35
	Z-25°C /+20°C	7	4	3	2	2	2	2
	Z-40°C /+20°C	15	8	8	4	4	3	3
耐焊接热 Resistance to Soldering Heat	在 250°C的条件下, 电容器在热板上保持 30 秒, 然后从热板上取出电容器, 让其在室温下恢复, 电容器应满足以下要求: 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 following requirement:							
	电容量变化率 Capacitance change	±10% 初始测量值以内 Within ±10% of the initial value						
	损耗角正切 Dissipation factor	≤ 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						

外形图及尺寸 Diagram of Dimensions



标称电容量、额定电压、额定纹波电流与外形尺寸对应表  
Nominal capacitance, rated voltage, rated ripple current and case size table

V Item Cap.(μF)	4		6.3		10		16		25		35		50	
	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)
0.1														
0.22														
0.33														
0.47														
1.0													4×5.4	6.3
2.2													4×5.4	11
3.3													4×5.4	14
4.7									4×5.4	13	4×5.4	16	5×5.4	19
10							4×5.4	18	5×5.4	23	5×5.4	27	6.3×5.4	30
22	4×5.4	22	4×5.4	22	5×5.4	27	5×5.4	30	6.3×5.4	38	6.3×5.4	44	6.3×7.7	51
33	5×5.4	30	5×5.4	30	5×5.4	35	6.3×5.4	40	6.3×5.4	48	6.3×7.7	59	6.3×7.7	60
47	5×5.4	36	5×5.4	36	6.3×5.4	46	6.3×5.4	50	6.3×7.7	66	6.3×7.7	80	6.3×7.7 8×6.5	63
100	6.3×5.4	60	6.3×5.4	60	6.3×5.4	60	6.3×5.4	95	6.3×7.7 8×6.5	91	6.3×7.7	100	8×10.5	230
150	6.3×5.4	86	6.3×5.4	86	6.3×7.7	86	6.3×7.7		8×10.5	240	8×10.5	260	10×10.5	250
220	6.3×7.7	102	6.3×7.7	102	6.3×7.7 8×6.5	105	6.3×7.7	105	8×10.5	320	10×10.5	450	10×10.5	375
330	6.3×7.7	105	8×10.5	290	8×10.5	290	8×10.5	290	10×10.5	450				
470	6.3×7.7	105	8×10.5	340	8×10.5	320	8×10.5	320	10×10.5	490				
680	8×10.5	340	8×10.5	340	10×10.5	392	10×10.5	470						
1000	8×10.5	340	10×10.5	495	10×10.5	550								

I~ = 额定纹波电流 Rated ripple current (mA)(+105° C, 120Hz)

额定纹波电流的频率系数 Frequency coefficient of ripple current

Frequency 频率	50Hz	120Hz	300Hz	1kHz	10K~100KHz
Coefficient 系数	0.70	1.00	1.17	1.36	1.50