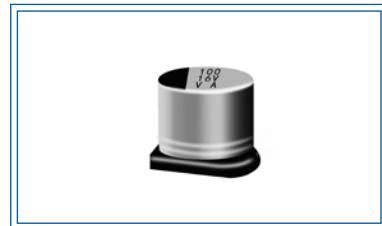


# VA 片式铝电解电容

## SMD Aluminum Electrolytic Capacitors

- 低阻抗。Low impedance.
- 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.
- 工作温度范围宽 (-55°C ~ +105°C)。Operating over wide temperature range.
- RoHS 指令已对应完毕。Adapted to the RoHS directive.

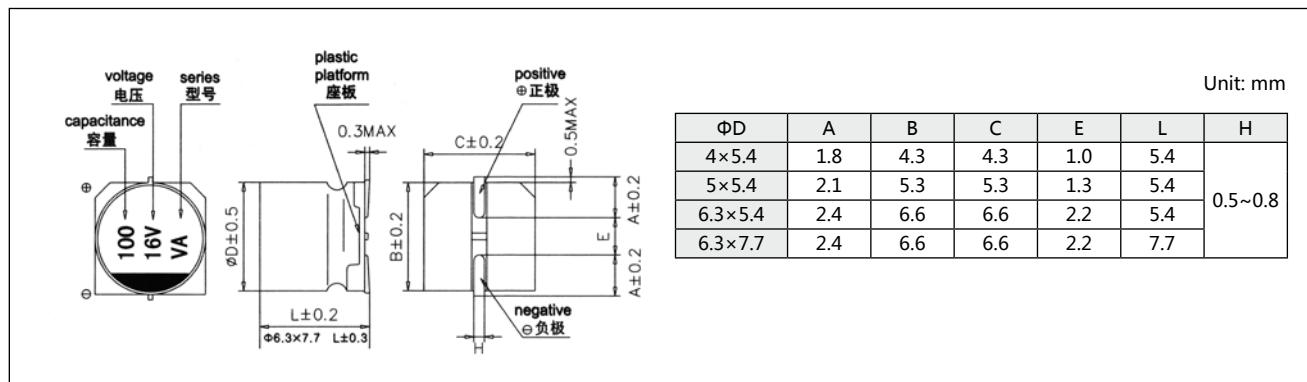


Surface Mount

### 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	6.3~35V											
标称电容量范围 Nominal Capacitance Range	1~220μF											
标称电容量允许偏差 Capacitance Tolerance	±20%(+20°C,120Hz)											
漏电流 Leakage Current	$I \leq 0.01C_R U_R$ or $3(\mu A)$ , 取较大者 ( 2 分钟 ) Whichever is greater (at 20°C , after 2 minutes) $C_R$ : 标称电容量 Nominal capacitance(μF), $U_R$ : 额定电压 Rated voltage(V)											
损耗角正切值 ( tgδ ) Dissipation Factor (Max) ( +20°C,120Hz )	$U_R(V)$	6.3	10	16	25	35						
	tgδ	0.22	0.19	0.16	0.14	0.12						
耐久性 Load Life	<p>+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:</p> <table border="1"> <tr> <td>电容量变化率 Capacitance change</td><td>±20% 初始测量值以内 Within ±20% of the initial value</td></tr> <tr> <td>损耗角正切 Dissipation factor</td><td>≤ 200% 初始规定值 Not more than 200% of the initial specified value</td></tr> <tr> <td>漏电流 Leakage current</td><td>≤ 初始规定值 Not more than the initial specified value</td></tr> </table>						电容量变化率 Capacitance change	±20% 初始测量值以内 Within ±20% 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	漏电流 Leakage current	≤ 初始规定值 Not more than the initial specified value
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高温贮存 Shelf Life	<p>+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.</p>											
低温特性 Low Temperature Stability 阻抗比 Impedance Ratio(120Hz)	$U_R(V)$	6.3	10	16	25	35						
	$Z-25^{\circ}\text{C} / +20^{\circ}\text{C}$	2	2	2	2	2						
	$Z-40^{\circ}\text{C} / +20^{\circ}\text{C}$	4	4	3	3	3						
耐焊接热 Resistance to Soldering Heat	<p>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:</p> <table border="1"> <tr> <td>电容量变化率 Capacitance change</td><td>±10% 初始测量值以内 Within ±10% of the initial value</td></tr> <tr> <td>损耗角正切 Dissipation factor</td><td>≤ 初始规定值 Not more than the initial specified value</td></tr> <tr> <td>漏电流 Leakage current</td><td>≤ 初始规定值 Not more than the initial specified value</td></tr> </table>						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
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## 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

Cap.(μF)	V	6.3			10			16			25			35		
		ΦD×L (mm)	Impedance Ω	I~ (mA)												
1.0														4×5.4	5.0	50
1.5														4×5.4	5.0	50
2.2														4×5.4	5.0	50
3.3														4×5.4	5.0	50
4.7											4×5.4	5.0	50	4×5.4	5.0	50
6.8											4×5.4	2.6	50	5×5.4	2.6	80
10								4×5.4	5.0	50	5×5.4	2.6	80	5×5.4	2.6	80
15								5×5.4	2.6	80	6.3×5.4	1.3	80	6.3×5.4	1.3	115
22	4×5.4	5.0	50	5×5.4	2.6	80	5×5.4	2.6	80	6.3×5.4	1.3	115	6.3×5.4	1.3	115	
33	5×5.4	2.6	80	5×5.4	2.6	80	6.3×5.4	1.3	115	6.3×5.4	1.3	115	6.3×7.7	0.8	150	
47	5×5.4	2.6	80	6.3×5.4	1.3	115	6.3×5.4	1.3	115	6.3×7.7	0.8	150	6.3×7.7	0.8	150	
68	6.3×5.4	1.3	115	6.3×5.4	1.3	115	6.3×7.7	0.8	150	6.3×7.7	0.8	150				
100	6.3×5.4	1.3	115	6.3×7.7	0.8	150	6.3×7.7	0.8	150							
150	6.3×7.7	0.8	150	6.3×7.7	0.8	150										
220	6.3×7.7	0.8	150													

I~ = 额定纹波电流 (mA) (105°C, 100KHz)  
Low impedance (20°C, 100KHz)

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

Frequency 频率	50Hz	120Hz	300Hz	1kHz	≥ 10kHz
Coefficient 系数	0.64	0.50	0.64	0.83	1.00