



VA

铝电解电容器-贴片型

Aluminum electrolytic capacitor- SMD type

## 特点 Features

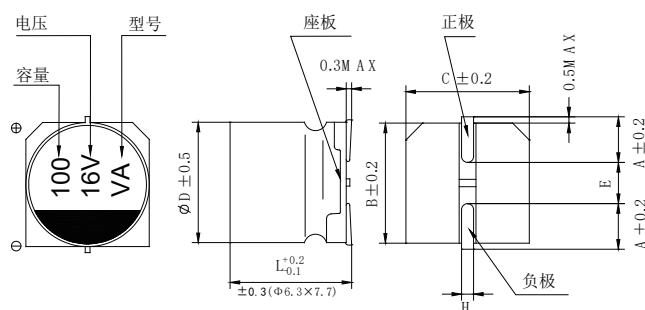
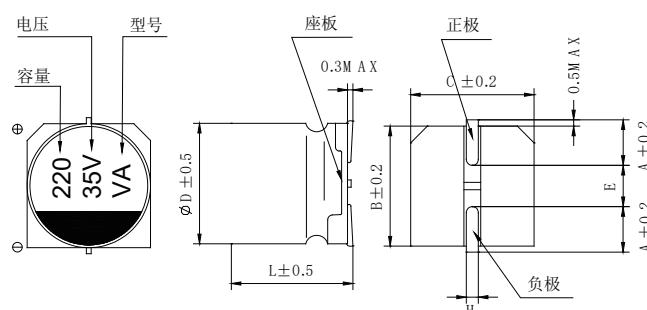
- 低阻抗。Low impedance.
- 适用于再流焊。Reflow soldering is available.
- 适用于高密度表面组装。available for high density surface mounting.
- 工作温度范围宽 (-55°C ~ +105°C) Operating over wide temperature range.
- RoHS指令 (2002/95/EC) 已对应完毕。Adapted to the RoHS directive (2002/95/EC).



## 主要技术性能 Specifications

项目 Items	特性 Performance Characteristics							
工作温度范围 Operating Temperature Range	-55~+105°C							
额定电压范围 Rated Voltage Range	6.3~50V							
标称电容量范围 Nominal Capacitance Range	1~1000μF							
标称电容量允许偏差 Capacitance Tolerance	±20% (20°C, 120Hz)							
漏电流 Leakage Current	$I \leq 0.01CRVR$ or $3(\mu A)$ , 取较大者 (2分钟) CR: 标称电容量 ( $\mu F$ ) UR: 额定电压 (V) $I \leq 0.01CRVR$ or $3(\mu A)$ Whichever is greater(at 20°C, after 2 minutes) CR: Nominal Capacitance ( $\mu F$ ) UR: Rated voltages (V)							
损耗角正切 (tgδ) Dissipation Factor (Max) 20°C, 120Hz	$U_R$ (V)	6.3	10	16	25	35	50	
	$tg\delta$	0.22	0.19	0.16	0.14	0.12	0.12	
耐久性 Load Life	$+105^{\circ}C$ 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 $105^{\circ}C$ , the capacitor shall meet the following requirement:							
	电容量变化率 Capacitance Change		$\pm 30\%$ 初始值以内 Within $\pm 30\%$ of the initial value					
	损耗角正切 Dissipation Factor		$\leq 300\%$ 初始规定值 Not more than 300% of the initial specified value					
	漏电流 Leakage Current		$\leq$ 初始规定值 Not more than the initial specified value					
高温贮存 Shelf Life	$+105^{\circ}C$ 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 $+105^{\circ}C$ , the capacitors shall meet the requirement of load life above							
低温特性 Low Temperature Stability 阻抗比 Impedance Ratio (120Hz)	$U_R$ (V)	6.3	10	16	25	35	50	
	$Z(-25^{\circ}C)/Z(+20^{\circ}C)$	2	2	2	2	2	2	
	$Z(-55^{\circ}C)/Z(+20^{\circ}C)$	4	4	3	3	3	3	
耐焊接热 Resistance to Soldering Heat	$250^{\circ}C$ 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 $250^{\circ}C$ 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		$\pm 10\%$ 初始值以内 Within $\pm 10\%$ of the initial value					
	损耗角正切 Dissipation Factor		$\leq$ 初始规定值 Not more than the initial specified value					
	漏电流 Leakage Current		$\leq$ 初始规定值 Not more than the initial specified value					

## 外形图及尺寸表 Case Size Table

 $\Phi 4 \sim \Phi 6.3$  $\Phi 8 \sim \Phi 10$ 

单位 Unit: mm

	4×5.4	5×5.4	6.3×5.4	6.3×7.7	8×6.5	8×10.5	10×10.5
A	3.0	2.1	2.4	2.4	2.9	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3
E	1.0	1.3	2.2	2.2	2.3	3.1	4.5
L	5.4	5.4	5.4	7.7	6.5	10.5	10.5
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

V μF	6.3			10			16			25			35			50			
	D×L mm	Impedance Ω	I~ mA																
1.0																	4×5.4	5.0	30
2.2																	4×5.4	5.0	30
3.3																	4×5.4	5.0	30
4.7																	4×5.4	3.0	50
10																	60	5×5.4	3.0
22				4×5.4	3.0	60	5×5.4	1.8	95	5×5.4	1.8	95	5×5.4	1.8	95	6.3×5.4	2.0	70	
33	5×5.4	1.8	95	5×5.4	1.8	95	6.3×5.4	1.0	140	6.3×5.4	1.0	140	6.3×5.4	1.0	140	6.3×7.7	1.4	120	
47	5×5.4	1.8	95	6.3×5.4	1.0	140	6.3×5.4	1.0	140	6.3×5.4	1.0	140	6.3×5.4	1.0	140	6.3×7.7	1.4	120	
100	6.3×5.4	1.0	140	6.3×5.4	1.0	140	6.3×5.4	1.0	140	6.3×7.7	0.7	220	8×10.5	0.3	450	8×10.5	0.6	300	
220	6.3×5.4	1.0	140	6.3×7.7	0.7	220	6.3×7.7	0.7	220	8×10.5	0.3	450	8×10.5	0.3	450	10×10.5	0.3	500	
330	6.3×7.7	0.7	220	8×10.5	0.3	450	8×10.5	0.3	450	8×10.5	0.3	450	10×10.5	0.15	650				
470	8×10.5	0.3	450	8×10.5	0.3	450	8×10.5	0.3	450	10×10.5	0.15	650	10×12.5	0.13	650				
1000	8×10.5	0.3	450	10×10.5	0.15	650													

I~ = Rated ripple current (mA) (105°C, 100kHz) I~ = 额定纹波电流 (mA) (105°C, 100kHz)  
20°C 100 KHz时的电阻 (Ω) MAX

## 额定纹波电流频率修正系数

## Frequency correction factor for ripple current

Frequency 频率	50Hz	120Hz	300Hz	1Khz	≥ 10Khz
Coefficient 系数	0.35	0.50	0.64	0.83	1.00