

HVZ

# 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指令对应完毕。Adapted to the RoHS directive.

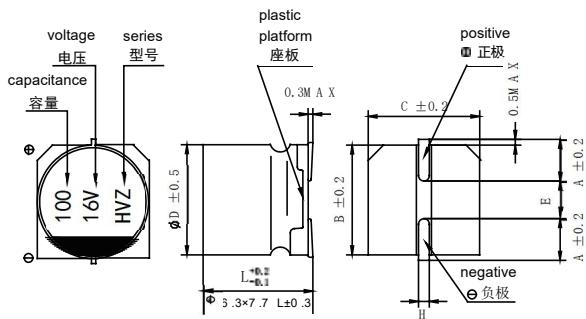


### 主要技术性能 Specificattioions

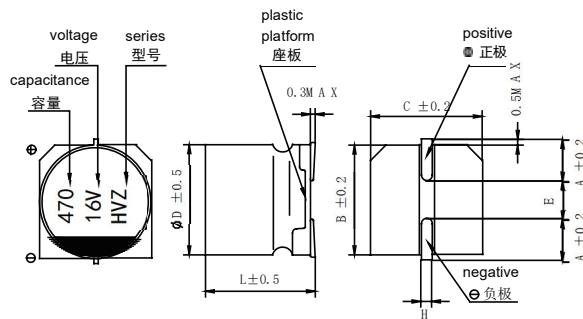
项目 Items	特性 Performance Characteristics							
工作温度范围 Operating Temperature Range	-55~+105°C							
额定电压范围 Rated Voltage Range	6.3~50V							
标称电容量范围 Nominal Capacitance Range	1~220μF							
标称电容量允许偏差 Capacitance Tolerance	±20%(20°C, 120Hz)							
漏电流 Leakage Current	<p style="text-align: center;"><math>I \leq 0.01 CRVR</math> or <math>3(\mu A)</math>, 取较大者(2分钟) CR: 标称电容量(μF) UR: 额定电压(V)  <math>I \leq 0.01 CRVR</math> or <math>3(\mu A)</math> Whichever is greater(at 20°C, after 2 minutes)  CR: Nominal Capacitance (μF) UR: Rated voltages (V)</p>							
损耗角正切(tgδ) Dissipation Factor (Max) 20°C, 120Hz	$U_r$ (V)	6.3	10	16	25	35	50	
	$\operatorname{tg}\delta$	0.22	0.19	0.16	0.14	0.12	0.12	
耐久性 Load Life	<p style="text-align: center;">+105°C施加额定电压1000小时后, 电容器应满足以下要求:  After 1000 hours' application of rated voltage at 105°C, the capacitor shall meet the following requirement:</p>							
	<p style="text-align: center;">电容量变化率 Capacitance Change</p>		±20%初始值以内 Within ±20% of the initial value					
	<p style="text-align: center;">损耗角正切 Dissipation Factor</p>		≤ 200%初始规定值 Not more than 200% of the initial specified value					
	<p style="text-align: center;">漏电流 Leakage Current</p>		≤ 初始规定值 Not more than the initial specified value					
高温贮存 Shelf Life	<p style="text-align: center;">+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	50	
	$Z(-25^\circ\text{C})/Z(+20^\circ\text{C})$	2	2	2	2	2	2	
	$Z(-55^\circ\text{C})/Z(+20^\circ\text{C})$	4	4	3	3	3	3	
耐焊接热 Resistance to Soldering Heat	<p style="text-align: center;">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>							
	<p style="text-align: center;">电容量变化率 Capacitance Change</p>		±10%初始值以内 Within ±10% of the initial value					
	<p style="text-align: center;">损耗角正切 Dissipation Factor</p>		≤ 初始规定值 Not more than the initial specified value					
	<p style="text-align: center;">漏电流 Leakage Current</p>		≤ 初始规定值 Not more than the initial specified value					

### 外形图及尺寸表 Case Size Table

Φ4~Φ6.3



Φ8~Φ10



单位 Unit: mm

	4×5.4	5×5.4	6.3×5.4	6.3×7.7	8×10.5	10×10.5
A	3.0	2.1	2.4	2.4	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	10.3
E	1.0	1.3	2.2	2.2	3.1	4.5
L	5.4	5.4	5.4	7.7	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		
4.7																4×5.4	3.0	50	5×5.4	3.0	50
10							4×5.4	3.0	50	4×5.4	3.0	50	5×5.4	1.8	80	6.3×5.4	2.0	60			
22	4×5.4	3.0	50	4×5.4	3.0	50	5×5.4	1.8	80	5×5.4	1.8	80	5×5.4	1.8	80	6.3×5.4	2.0	60			
33	5×5.4	1.8	80	5×5.4	1.8	80	5×5.4	1.8	80	5×5.4	1.8	80	6.3×5.4	1.0	115	6.3×7.7	1.4	100			
47	5×5.4	1.8	80	5×5.4	1.8	30	5×5.4	1.8	80	6.3×5.4	1.0	115	6.3×5.4	1.0	115	6.3×7.7	1.4	100			
100	6.3×5.4	1.0	115	6.3×5.4	1.0	115	6.3×5.4	1.0	115	6.3×7.7	0.7	150	6.3×7.7	0.7	150	8×10.5	0.6	130			
220	6.3×5.4	1.0	115	6.3×7.7	0.7	150	6.3×7.7	0.7	150	8×10.5	0.3	220	8×10.5	0.3	220	10×10.5	0.3	210			
330	6.3×7.7	0.7	150	8×10.5	0.3	220	8×10.5	0.3	220	8×10.5	0.3	220	10×10.5	0.15	330						
470	8×10.5	0.3	220	8×10.5	0.3	220	8×10.5	0.3	220	10×10.5	0.15	330									
1000	10×10.5	0.15	330	10×10.5	0.15	330	10×10.5	0.15	330												

— I~ = Rated ripple current (mA) (105°C, 100KHz) I~ = 额定纹波电流(mA)(105°C, 100KHz)

Low impedance (20°C 100KHz)

### 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~100Hz
Coefficient 系数	0.35	0.50	0.64	0.83	1.00