

# HVS

## 铝电解电容器-贴片型 Aluminum electrolytic capacitor- SMD type

### 特点 Features

- 产品直径 Case diameter:  $\Phi 4\sim 13\text{mm}$ .
- 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.

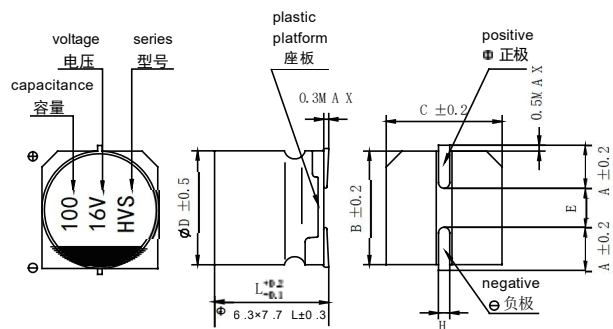


### 主要技术性能 Specifications

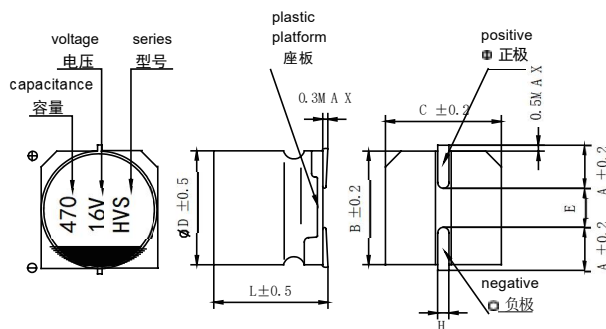
项目 Items	特性 Performance Characteristics										
工作温度范围 Operating Temperature Range	-40~85°C										
额定电压范围 Rated Voltage Range	6.3~100V										
标称容量范围 Nominal Capacitance Range	0.1~2200 $\mu\text{F}$										
标称容量允许偏差 Nominal Capacitance Tolerance	$\pm 20\%$ (20°C, 120Hz)										
漏电流 Leakage Current	$I \leq 0.01\text{CRVR}$ or $3(\mu\text{A})$ , 取较大者(2分钟) CR: 标称容量( $\mu\text{F}$ ) UR: 额定电压(V) $I \leq 0.01\text{CRVR}$ or $3(\mu\text{A})$ Whichever is greater(at 20°C, After 2 minutes) CR: Nominal Capacitance ( $\mu\text{F}$ ) UR: Rated voltages (V)										
损耗角正切(tg $\delta$ ) Dissipation Factor (Max) 20°C, 120Hz	$U_r$ (V)	6.3	10	16	25	35	50	63	100		
	tg $\delta$	0.28	0.24	0.20	0.16	0.14	0.12	0.12	0.10		
耐久性 Load Life	+85°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 85°C, the capacitor shall meet the following requirement:										
	容量变化率 Capacitance Change	$\pm 20\%$ 初始值以内 Within $\pm 20\%$ of the initial value									
	损耗角正切 Dissipation Factor	$\leq 200\%$ 初始规定值 Not more than 200% 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	+85°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 +85°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)										
	$Z(-25^\circ\text{C})/Z(+20^\circ\text{C})$	$< \Phi 8$	4	3	2	2	2	2	2	2	2
		$\geq \Phi 8$	5	4	3	2	2	2	2	2	2
	$Z(-40^\circ\text{C})/Z(+20^\circ\text{C})$	$< \Phi 8$	8	8	4	4	3	3	3	3	3
$\geq \Phi 8$		10	8	6	4	3	3	3	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.										
	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

Φ4~Φ6.3



Φ8~Φ13



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	13×13.5
A	1.8	2.1	2.4	2.4	2.9	2.9	3.2	4.7
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3	13
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3	13
E	1.0	1.3	2.2	2.2	2.3	3.1	4.5	4.5
L	5.4	5.4	5.4	7.7	6.5	10.5	10.5	13.5
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		63		100	
	D×L mm	I~mA	D×L mm	I~mA	D×L mm	I~mA	D×L mm	I~mA	D×L mm	I~mA	D×L mm	I~mA	D×L mm	I~mA	D×L mm	I~mA
0.1											4×5.4	3.2				
0.22											4×5.4	4.7				
0.33											4×5.4	5.7				
0.47											4×5.4	6.8				
1.0											4×5.4	10				
2.2											4×5.4	15				
3.3											4×5.4	18				
4.7							4×5.4	20	4×5.4	20	4×5.4	24	5×5.4	20	6.3×7.7	50
											5×5.4	25				
10					4×5.4	26	4×5.4	24	4×5.4	24	5×5.4	41	6.3×5.4	32	8×10.5	90
							5×5.4	32	5×5.4	34	6.3×5.4	56				
22	4×5.4	31	4×5.4	30	4×5.4	30	5×5.4	38	5×5.4	39	6.3×5.4	71	6.3×7.7	60	8×10.5	90
			5×5.4	39	5×5.4	44	6.3×5.4	60	6.3×5.4	59						
33	4×5.4	31	4×5.4	28	5×5.4	45	5×5.4	46	6.3×5.4	65	6.3×7.7	94	8×10.5	117	10×10.5	120
	5×5.4	44	5×5.4	48												
47	4×5.4	40	5×5.4	47	5×5.4	52	6.3×5.4	70	6.3×7.7	94	6.3×7.7	105	8×10.5	120	10×10.5	123
	5×5.4	52			6.3×5.4	75					8×10.5	140				
100	5×5.4	47	5×5.4	54	6.3×5.4	103	6.3×7.7	143	6.3×7.7	132	8×10.5	200	10×10.5	180	13×13.5	450
	6.3×5.4	89	6.3×5.4	98					8×10.5	175	10×10.5	250				
220	6.3×5.4	91	6.3×7.7	173	6.3×7.7	162	8×10.5	230	8×10.5	200	10×10.5	320	13×13.5	510		
			8×6.5	165	8×10.5	280			10×10.5	310						
330	6.3×7.7	188	8×10.5	390	8×10.5	320	8×10.5	270	10×10.5	340	10×10.5	360	13×13.5	620		
								10×10.5								
470	8×10.5	380	8×10.5	390	8×10.5	350	10×10.5	380	13×13.5	600						
						10×10.5	420									
680	8×10.5	370	10×10.5	480	10×10.5	440	13×13.5	700	13×13.5	690						
1000	8×10.5	370	10×10.5	580	13×13.5	780	13×13.5	760								
	10×10.5	700														
2200	10×13	820														

I~ = Rated ripple current (mA) (85°C, 120Hz) I~ = 额定纹波电流(mA)(85°C, 120Hz)