

VS 型片式铝电解电容

VS Series Chip Type Aluminum Electrolytic Capacitors

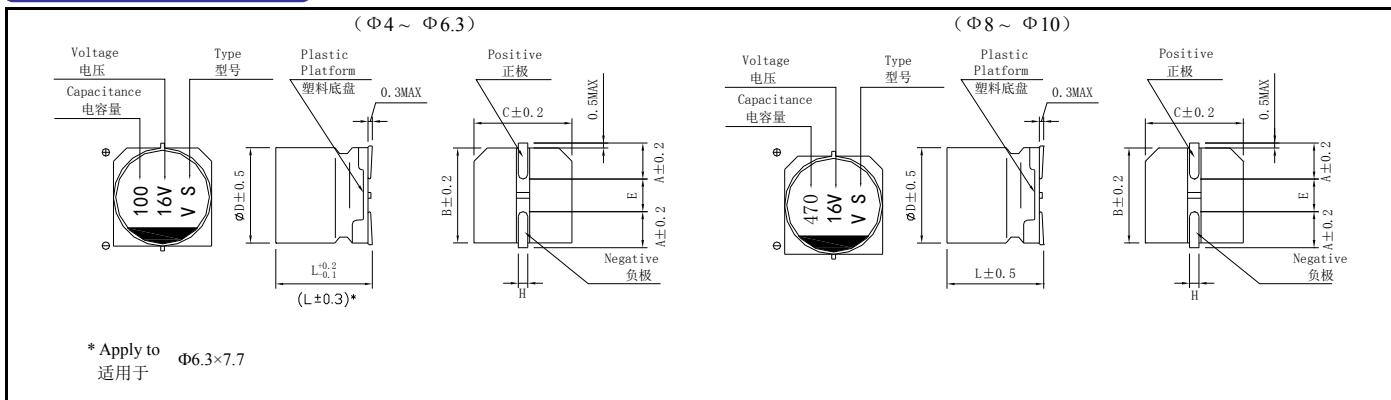
特点 Features

- 产品直径 Case diameter: $\Phi 4\text{mm} - \Phi 10\text{mm}$.
- 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 Characteristics														
工作温度范围 Operating Temperature Range	$-40^\circ\text{C} \sim 85^\circ\text{C}$														
额定电压范围 Rated Voltage Range	$6.3\text{V} \sim 100\text{V}$														
标称电容量范围 Nominal Capacitance Range	$0.1 \sim 1500\mu\text{F}$														
标称电容量允许偏差 Nominal Capacitance Tolerance	$\pm 20\% (20^\circ\text{C}, 120\text{Hz})$														
漏电流 Leakage Current	$I \leq 0.01C_R V_R$ or $3(\mu\text{A})$, 取较大者 (2 分钟) C_R : 标称电容量 (μF) V_R : 额定电压 (V) $I \leq 0.01C_R V_R$ or $3(\mu\text{A})$ Whichever is greater(at 20°C , After 2 minutes) C_R : Nominal Capacitance (μF) V_R : Rated voltages (V)														
损耗角正切 (tgδ) Dissipation Factor (Max) $20^\circ\text{C}, 120\text{Hz}$	U _R (V)	6.3	10	16	25	35	50	63	100						
	tgδ	0.28	0.24	0.20	0.16	0.14	0.12	0.12	0.10						
耐久性 Load Life	$+85^\circ\text{C}$ 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: <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>$\pm 20\%$初始值以内 Within $\pm 20\%$ of the initial value</td> </tr> <tr> <td>损耗角正切 Dissipation Factor</td> <td>$\leq 200\%$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>\leq 初始规定值 Not more than the initial specified value</td> </tr> </table>									电容量变化率 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
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高温贮存 Shelf Life	$+85^\circ\text{C}$ 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 $+85^\circ\text{C}$, the capacitors shall meet the requirement of load life above														
低温特性 Low Temperature Stability	U _R (V)	6.3	10	16	25	35	50	63	100						
Z(-25°C)/Z(+20°C)	< $\Phi 8$	4	3	2	2	2	2	2	2						
	$\geq \Phi 8$	5	4	3	2	2	2	2	2						
阻抗比 Impedance Ratio (120Hz)	< $\Phi 8$	8	8	4	4	3	3	3	3						
	Z(-40°C)/Z(+20°C)	10	8	6	4	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: <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>$\pm 10\%$初始值以内 Within $\pm 10\%$ of the initial value</td> </tr> <tr> <td>损耗角正切 Dissipation Factor</td> <td>\leq 初始规定值 Not more than the initial specified value</td> </tr> <tr> <td>漏电流 Leakage Current</td> <td>\leq 初始规定值 Not more than the initial specified value</td> </tr> </table>									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
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尺寸图 Dimensions



	4 × 5.4	5 × 5.4	6.3 × 5.4	6.3 × 7.7	8 × 6.5	8 × 10.5	10 × 10.5
A	1.8	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、额定纹波电流与外形尺寸对应表

Nominal capacitance, rated voltage, rated ripple current and case size table

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	22	4×5.4	20	4×5.4	24			6.3×7.7	40
											5×5.4	25				
10				4×5.4	26	4×5.4	24	4×5.4	24	5×5.4	41	6.3×7.7	50	8×10.5	77	
						5×5.4	32	5×5.4	34	6.3×5.4	43					
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	96	8×10.5	100
			5×5.4	39	5×5.4	44	6.3×5.4	55	6.3×5.4	59						
33	4×5.4	31	4×5.4	34	5×5.4	44	5×5.4	46	6.3×5.4	65	6.3×7.7	94	8×10.5	117	10×10.5	130
			5×5.4	44	5×5.4	48	6.3×5.4	63	6.3×5.4	67						
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	10×10.5	140		
			5×5.4	52	6.3×5.4	67	6.3×5.4	75			8×10.5	140				
100	5×5.4	47	5×5.4	54	6.3×5.4	103	6.3×77	143	6.3×7.7	132	8×10.5	200				
	6.3×5.4	89	6.3×5.4	98			6.3×77		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				
			8×6.5	250	8×10.5	280	10×10.5	310	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	360						
							10×10.5	340								
470	8×10.5	380	8×10.5	390	8×10.5	350	10×10.5	380								
						10×10.5	420									
1000	8×10.5	370	10×10.5	580												
	10×10.5	700														
1500	10×10.5	750														

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