

VL 型片式铝电解电容

VL Series Chip Type Aluminum Electrolytic Capacitors

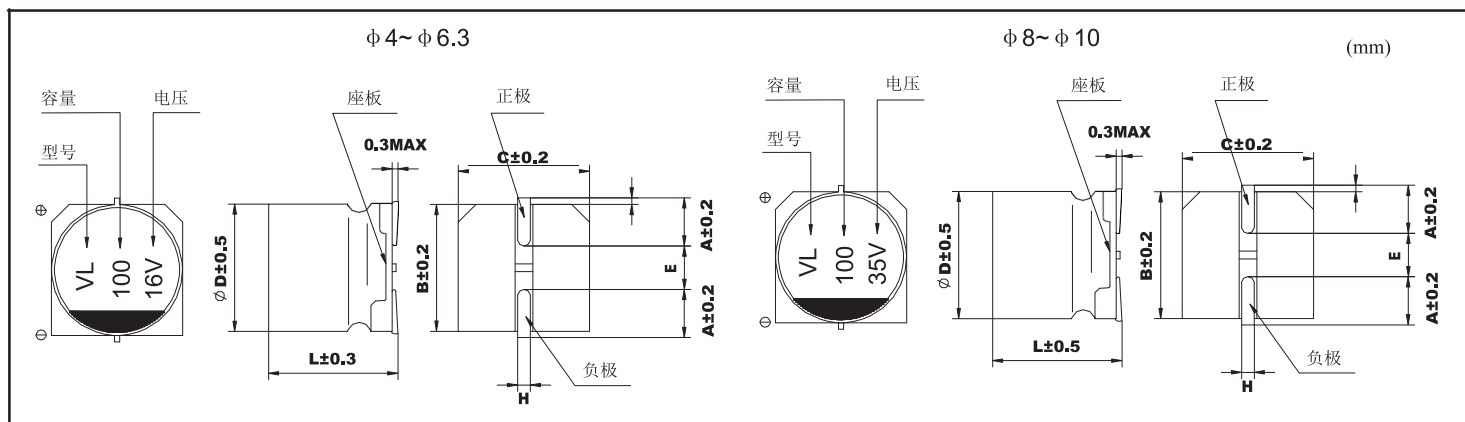
特点 Features

- 高温长寿命品。High temperature and long life.
- 适用于回流焊。Reflow soldering is available.
- 适用于高密度表面贴装。Suitable for high density SMT.
- 符合ROHS 指令标准。Comply with ROHS directive standards.

主要技术性能 Specifications

项目 Items	特性 Characteristics						
工作温度范围 Operating Temperature Range	-40℃ ~+105℃						
额定电压范围 Rated Voltage Range	6.3V ~ 50V						
标称电容容量范围 Nominal Capacitance Range	1 ~ 1000μF						
标称电容容量允许偏差 Nominal Capacitance Tolerance	±20% (20℃, 120Hz)						
漏电流 Leakage Current	I≤0.01CRVR or 3(μ A), 取较大者 (2 分钟) CR: 标称电容量 (μ F) UR: 额定电压 (V) I≤0.01CRVR or 3(μ A) Whichever is greater(at 20℃, after 2 minutes) CR: Nominal Capacitance (μ F) UR: Rated voltages (V)						
损耗角正切 (tg δ) Dissipation Factor (Max) 20℃, 120Hz	UR (V)	6.3	10	16	25	35	50
	tg δ	0.32	0.24	0.20	0.16	0.13	0.12
耐久性 Load Life	+105℃施加额定电压 5000 小时后 (ΦD=4, 5 和 6.3 为 3000 小时) , 电容器应满足以下要求: After 5000 hours (3000 hours for ΦD = 4, 5 and 6.3) . application of rated voltage at 105℃, the capacitor shall meet the following requirement:						
	电容量变化率 Capacitance Change		±30%初始值以内 Within ±30% of the initial value				
	损耗角正切 Dissipation Factor		≤ 300%初始规定值 Not more than 300% of the initial specified value				
	漏电流 Leakage Current		≤ 初始规定值 Not more than the initial specified value				
高温贮存 Shelf Life	+105℃ 贮存 1000 小时后, 加额定工作电压 30 分钟, 电容器应满足以上耐久性要求 After storage for 1000 hours at +105℃, UR to be applied for 30 minutes ,the capacitors shall meet the requirement of load life above						
低温特性 Low Temperature Stability 阻抗比 Impedance Ratio (120Hz)	UR (V)	6.3	10	16	25	35	50
	Z(-25℃)/Z(+20℃)	4	3	2	2	2	2
	Z(-40℃)/Z(+20℃)	10	7	5	3	3	3
耐焊接热 Resistance to Soldering Heat	在 250℃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℃ 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		±10%初始值以内 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				

外形图及尺寸表 Case Size Table



	4 x 5.8	5x5.8	6.3x5.8	6.3x7.7	8x10.5	10x10.5
A	1.8	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	5.8	5.8	5.8	7.7	10.5	10.5
H	0.5~0.8				0.8~1.1	

■ 标称电容量、额定电压、额定纹波电流与外形尺寸对应表

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

V μF	6.3		10		16		25		35		50	
	D×L mm	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												
0.22												
0.33												
0.47												
1.0											4x5.8	8
2.2											4x5.8	12
3.3											4x5.8	17
4.7									4x5.8	20	5x5.8	21
10					4x5.8	20	5x5.8	30	5x5.8	30	6.3x5.8	35
22			5x5.8	30	5x5.8	35	6.3x5.8	45	6.3x5.8	50	6.3x7.7	52
33	5x5.8	40	5x5.8	40	6.3x5.8	50	6.3x5.8	50	6.3x7.7	62	8x10.5	80
47	5x5.8	45	6.3x5.8	55	6.3x5.8	60	6.3x7.7	65	8x10.5	100	8x10.5	95
100	6.3x5.8	70	6.3x5.8	75	6.3x7.7	90	8x10.5	140	10x10.5	260	10x10.5	99
220	6.3x7.7	105	8x10.5	170	10x10.5	230	10x10.5	230	10x10.5	230		
330	8x10.5	245	10x10.5	245	10x10.5	240	10x10.5	250				
470	10x10.5	350	10x10.5	350	10x10.5	360						
1000	10x10.5	350	10x10.5									

I~ = Rated ripple current (mA) (105°C, 120Hz) I~ = 额定纹波电流 (mA) (105°C, 120Hz)

■ 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	0.35	0.50	0.64	0.83	1.00