VL 片式铝电解电容

VL Chip Type Aluminum Electrolytic Capacitors

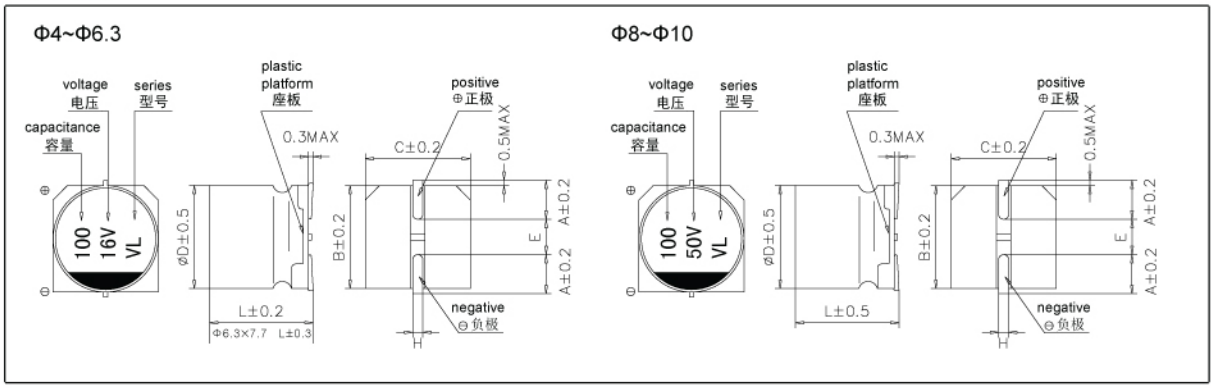
■ 特点 Features

◎ +105℃5000小时保证品。load life of 5000 hours at +105°C.
◎ 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℃ ~+105℃						
额定电压范围 Rated Voltage Range	6.3V ~ 50V						
标称电容量范围 Nominal Capacitance Range	0.1 ~ 1000μF						
标称电容量允许偏差 Nominal Capacitance Tolerance	±20%（20℃，120Hz）						
漏电流 Leakage Current	I≤0.01CRVR or 3(μA)，取较大者（2分钟） CR：标称电容量（μF） UR：额定电压（V） I≤0.01CRVR or 3(μA) Whichever is greater(at 20℃, after 2 minutes) CR: Nominal Capacitance (μF) UR: Rated voltages (V)						
损耗角正切（tgδ） Dissipation Factor (Max) 20℃, 120Hz	UR (V)	6.3	10	16	25	35	50
	tgδ	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2000小时），电容器应满足以下要求：： After 5000 hours (2000 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,电容器应满足以上耐久性要求: After storage for 1000 hours at +105℃, 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（tgδ） 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					

■ 尺寸图 Dimensions



(mm)

	4X5.4	5X5.4	6.3X5.4	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	5.4	5.4	5.4	7.7	10	10
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 siza 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											4X5.4	2.4
0.22											4X5.4	3.5
0.33											4X5.4	4.3
0.47											4X5.4	5.1
1.0											4X5.4	7.4
2.2											4X5.4	11
3.3											4X5.4	14
4.7									4X5.4	15	5X5.4	19
10					4X5.4	19	5X5.4	25	5X5.4	25	6.3X5.4	32
22			5X5.4	30	5X5.4	33	6.3X5.4	42	6.3X5.4	45	6.3X7.7	49
33	5X5.4	35	5X5.4	38	6.3X5.4	48	6.3X5.4	48	6.3X7.7	57	8X10.5	77
47	5X5.4	42	6.3X5.4	52	6.3X5.4	57	6.3X7.7	63	8X10.5	92	8X10.5	92
100	6.3X5.4	67	6.3X5.4	72	6.3X7.7	81	8X10.5	130	10X10.5	151	10X10.5	94
220	6.3X7.7	101	8X10.5	160	10X10.5	220	10X10.5	216	10X10.5	216		
330	8X10.5	230	10X10.5	238	10X10.5	238	10X10.5	238				
470	10X10.5	340	10X10.5	340	10X10.5	340						
1000	10X10.5	340										

I~=Rated ripple current(mA)(105℃, 120Hz) I~=额定纹波电流 (mA)(105℃,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	0.70	1.00	1.17	1.36	1.50