

VT 型片式铝电解电容

VT Series Chip Type Aluminum Electrolytic Capacitors

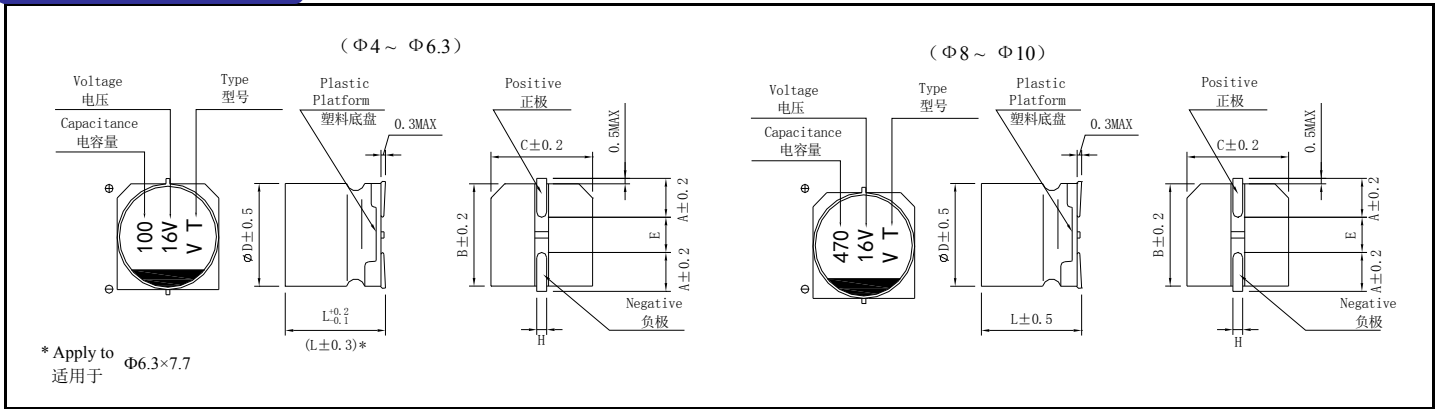
特点 Features

- 产品直径 Case diameter: Φ 4mm – Φ 10mm.
- 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 ($-40 \sim +105^{\circ}\text{C}$) Operating over wide temperature range.
- 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 $^{\circ}\text{C}$ ~ +105 $^{\circ}\text{C}$							
额定电压范围 Rated Voltage Range	6.3V ~ 50V							
标称容量范围 Nominal Capacitance Range	0.1 ~ 1500 μF							
标称容量允许偏差 Nominal Capacitance Tolerance	$\pm 20\%$ (20 $^{\circ}\text{C}$, 120Hz)							
漏电流 Leakage Current	$I \leq 0.01C_R V_R$ or 3(μA), 取较大者 (2分钟) C_R : 标称容量 (μF) U_R : 额定电压 (V) $I \leq 0.01C_R V_R$ or 3(μA) Whichever is greater (at 20 $^{\circ}\text{C}$, After 2 minutes) C_R : Nominal Capacitance (μF) U_R : Rated voltages (V)							
损耗角正切 (tg δ) Dissipation Factor (Max) 20 $^{\circ}\text{C}$, 120Hz	U_R (V)	4	6.3	10	16	25	35	50
	tg δ	0.35	0.28	0.24	0.20	0.16	0.14	0.12
耐久性 Load Life	+105 $^{\circ}\text{C}$ 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 $^{\circ}\text{C}$, the capacitor shall meet the following requirement:							
	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						
高温贮存 Shelf Life	+105 $^{\circ}\text{C}$ 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 +105 $^{\circ}\text{C}$, the capacitors shall meet the requirement of load life above							
低温特性 Low Temperature Stability	U_R (V)	4	6.3	10	16	25	35	50
阻抗比 Impedance Ratio (120Hz)	Z(-25 $^{\circ}\text{C}$)/Z(+20 $^{\circ}\text{C}$)	7	4	3	2	2	2	2
	Z(-40 $^{\circ}\text{C}$)/Z(+20 $^{\circ}\text{C}$)	15	8	6	4	4	3	3
耐焊接热 Resistance to Soldering Heat	在 250 $^{\circ}\text{C}$ 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 $^{\circ}\text{C}$ 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	$\pm 10\%$ 初始值以内 Within $\pm 10\%$ of the initial value						
	损耗角正切 (tg δ) 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						

尺寸图 Dimensions



(mm)

	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

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											4×5.4	2.3
0.22											4×5.4	3.4
0.33											4×5.4	4.1
0.47											4×5.4	5
1.0											4×5.4	10
2.2											4×5.4	16
3.3									4×5.4	13	4×5.4	16
4.7							4×5.4	22	4×5.4	22	5×5.4	23
10					4×5.4	28	5×5.4	28	5×5.4	30	6.3×5.4	32
22	4×5.4	29	5×5.4	30	5×5.4	39	6.3×5.4	55	6.3×5.4	60	6.3×7.7	51
33	5×5.4	34	5×5.4	34	5×5.4	35	6.3×5.4	65	8×6.5	84	6.3×7.7	70
47	5×5.4	46	6.3×5.4	48	6.3×5.4	70	6.3×5.4	70	6.3×7.7	80	6.3×7.7	80
100	6.3×5.4	71	6.3×5.4	69	6.3×5.4	70	6.3×7.7	100	8×10.5	296	8×10.5	230
220	6.3×7.7	120	6.3×7.7	120	6.3×7.7	120	8×10.5	320	10×10.5	435	10×10.5	375
330	8×10.5	290	8×10.5	305	8×10.5	425	10×10.5	450	10×10.5	450		
470	8×10.5	330	8×10.5	340	8×10.5	340	10×10.5	490				
1000	8×10.5	340	10×10.5	410	10×10.5	450						
1500	10×10.5	475										

└ 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	10K~100Hz
Coefficient 系数	0.70	1.00	1.17	1.36	1.50