VT1 Series 片式铝电解电容器105℃标准品

Standard of 105℃ Aluminum Electrolytic Capacitor of V-chip Type

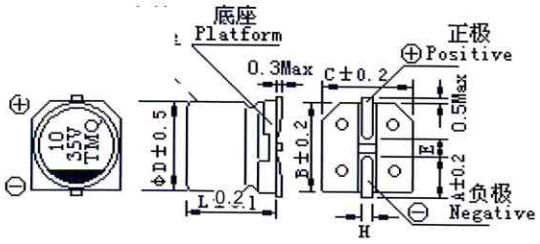
- 工作温度范围宽(–55℃ ~ +105℃)，1000小时 ●适用于再流焊
- 适用于高密度表面组装 ● 性能稳定，可靠性高。
- Operating over wide temperature range ●Reflow soldering is available
- Available for high density surface mounting ●High stability and reliability

■主要技术性能 Specifications

使用温度范围 Operating Temperature Range	–55 ~ +105℃
额定电压范围 Rated Voltage Range	6.3 ~ 50V DC
标称电容量允许偏差 Capacitance Tolerance	± 20% (120Hz, 20℃)
漏电流(20℃) Leakage Current	I≤0.01$C_R U_R$(μA)或 3μA 取较大者，(2 分钟) I≤0.01$C_R U_R$(μA) or 3μA, Whichever is greater (After 2 minutes)
损耗角正切值(120Hz 20℃) Dissipation Factor	U_R(V) 6.3 10 16 25 35 50 tg δ 0.26 0.20 0.16 0.14 0.12 0.12
温度特性 (120Hz) Temperature Characteristics Impedance Ratio (120Hz)	U_R(V) 6.3 10 16 25 35 50 $Z_{-25℃}/Z_{+20℃}$ 4 3 2 2 2 2 $Z_{-40℃}/Z_{+20℃}$ 8 6 4 4 3 3
耐久性 Load Life	+105℃施加额定电压 1000 小时,恢复 16 小时后,电容器应满足要求 After applying rated voltage for 1000 hours at +105℃ and then resumed 16 hours. The capacitor shall meet the following limits. 电容量变化率 Capacitance Change: ≤ ± 20%初始测量值 ≤ ± 20% of Initial measured value 漏电流值 Leakage: ≤规定值 ≤The specified value 损耗角正切值 Dissipation Factor: ≤2 倍规定值 ≤200% of the specified value
高温贮存 Shelf Life	+105℃,1000 小时，恢复 16 小时后,电容器应满足下列要求。 After storage for 1000 hours at +105℃ and then resumed 16 hours, the capacitor shall meet the following limits. 电容量变化率 Capacitance Change: ≤ ± 20%初始测量值 ≤ ± 20% of Initial measured value 漏电流值 Leakage: ≤2 倍的规定值 ≤200% of the specified value 损耗角正切值 Dissipation Factor: ≤2 倍规定值 ≤200% of the specified value
耐焊接热 Resistance to Soldering Heat	在 250℃的条件下,电容器应在热板上保持 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,then meet the following requirement. 电容量变化率 Capacitance Change: ≤ ± 10%初始测量值 ≤ ± 10% of Initial measured value 漏电流值 Leakage: ≤规定值 ≤The specified value 损耗角正切值 Dissipation Factor: ≤规定值 ≤The specified value

■尺寸及印字 Dimensions & Marking

(φ4～φ6.3)



mm

Size	φ4×5.4	φ5×5.4	φ6.3×5.4
A	1.8	2.1	2.4
B	4.3	5.3	6.6
C	4.3	5.3	6.6
E	1.0	1.3	2.2
L	5.4	5.4	5.4
H	0.5 ~ 0.9		

VT1 Series

■ 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

WV / mA / 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	1.0
0.22											4×5.4	2.0
0.33											4×5.4	3.0
0.47											4×5.4	4.0
1.0											4×5.4	8.0
2.2											4×5.4	11
3.3											4×5.4	13
4.7					4×5.4	12	4×5.4	13	4×5.4	14	5×5.4	18
10					4×5.4	20	4×5.4 5×5.4	14 20	5×5.4	24	6.3×5.4	28
22	4×5.4	20	4×5.4 5×5.4	21 27	4×5.4 5×5.4	22 31	5×5.4 6.3×5.4	25 36	5×5.4 6.3×5.4	27 40	6.3×5.4	42
33	4×5.4 5×5.4	22 27	4×5.4 5×5.4	23 34	5×5.4 6.3×5.4	28 40	5×5.4 6.3×5.4	29 44	6.3×5.4	50		
47	4×5.4 5×5.4	25 37	5×5.4 6.3×5.4	30 41	5×5.4 6.3×5.4	31 56	6.3×5.4	48				
100	5×5.4 6.3×5.4	39 57	6.3×5.4	53	6.3×5.4	75						
220	6.3×5.4	67										

I~额定纹波电流 Rated ripple current：(mA，105℃，120Hz)

■ 额定纹波电流的频率系数 Frequency coefficient of rated ripple current

Frequency 频率	50Hz	120Hz	300Hz	1KHz	≥10KHz
Coefficient 系数	0.70	1.00	1.17	1.36	1.50