

VN 型片式铝电解电容

VN Series Chip Type Aluminum Electrolytic Capacitors

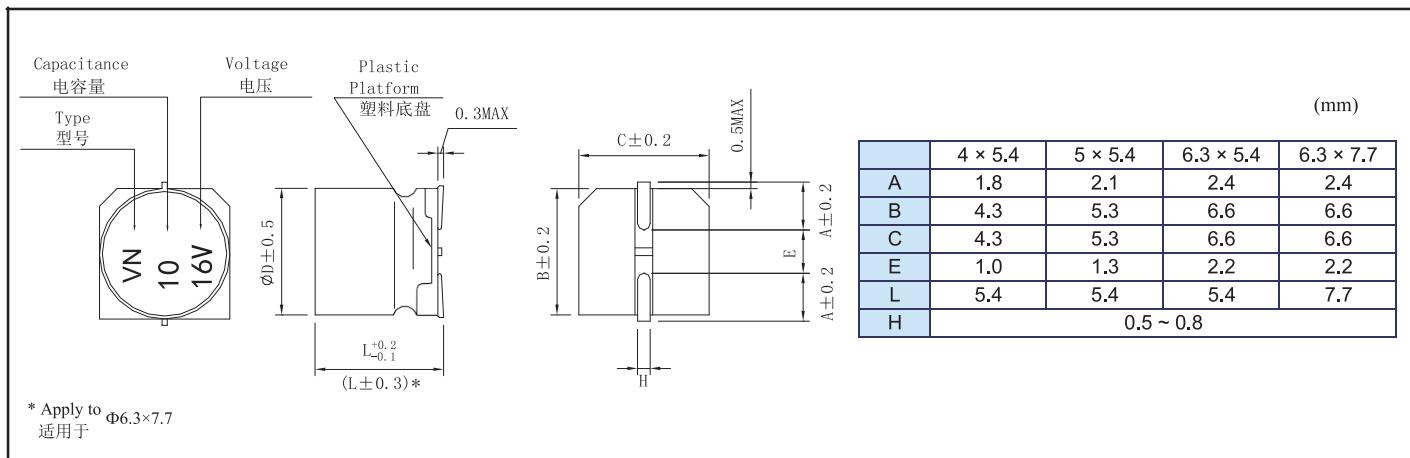
特点 Features

- 无极性产品。Bi-polar.
- 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°C ~ +85°C							
额定电压范围 Rated Voltage Range	6.3V ~ 35V							
标称电容量范围 Nominal Capacitance Range	0.1 ~ 100 μF							
标称电容量允许偏差 Nominal Capacitance Tolerance	± 20% (20°C, 120Hz)							
漏电流 Leakage Current	$I \leq 0.05CRVR$ or $10(\mu A)$, 取较大者 (2 分钟) CR: 标称电容量 (μF) UR: 额定电压 (V) $I \leq 0.05CRVR$ or $10(\mu A)$ Whichever is greater(at 20°C, After 2 minutes) CR: Nominal Capacitance (μF) UR: Rated voltages (V)							
损耗角正切 (tg δ) Dissipation Factor (Max) 20°C, 120Hz	UR (V)	6.3	10	16	25	35	50	
	tg δ	0.26	0.22	0.20	0.20	0.20	0.18	
耐久性 Load Life	+85°C 施加额定电压 1000 小时后, 每 250 小时换向一次, 电容器应满足以下要求: After 1000 hours' application of rated voltage at 85°C, with the polarity inverted every 250 hours, the capacitor shall meet the following requirement:							
	电容量变化率 Capacitance Change		± 20%初始值以内 Within ± 20% of the initial value					
	损耗角正切 Dissipation Factor		≤ 200%初始规定值 Not more than 200% 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°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 +125°C, 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°C)/Z(+20°C)		4	3	2	2	2	2
	Z(-40°C)/Z(+20°C)		8	6	4	4	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.							
	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



■ 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	
	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	2.3
0.22											4x5.4	3.3
0.33											4x5.4	4.1
0.47											4x5.4	4.9
1.0											4x5.4	8.4
2.2									4x5.4	10	5x5.4	13
3.3							4x5.4	13	5x5.4	17	5x5.4	17
4.7					5x5.4	13	5x5.4	20	5x5.4	21	6.3x5.4	20
10		4x5.4	18	5x5.4	20	6.3x5.4	35	6.3x5.4	35	6.3x7.7	36	
22	5x5.4	28	6.3x5.4	40	6.3x5.4	35	6.3x5.4	50	6.3x7.7	54		
33	6.3x5.4	37	6.3x5.4	50	6.3x5.4	50	6.3x7.7	61				
47	6.3x5.4	45	6.3x7.7	61	6.3x7.7	61						
100	6.3x7.7	82										
220												
330												
470												
1000												

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

■ 额定纹波电流的频率系数

Frequency coefficient of ripple current

Frequency 频率	50Hz	120Hz	300Hz	1KHz	$\geq 10\text{KHz}$
Coefficient 系数	0.70	1.00	1.17	1.36	1.50