



东莞市卓庆电子有限公司

承 认 书

APPROVING SHEET

CUSTOMER

客 户: _____

PART NAME : Chip-Aluminum Electrolytic Capacitor

品 名: 片式铝电解电容器

SERIES: _____

系 列: VD

SPECIFICATION: _____

规格: _____

DATE _____

日 期: _____

制 造		客 户	
MANUFACTURE		CUSTOMER	
拟 制 FORMULATE	批 准 APPROVAL	检 验 CHECK	批 准 APPROVAL

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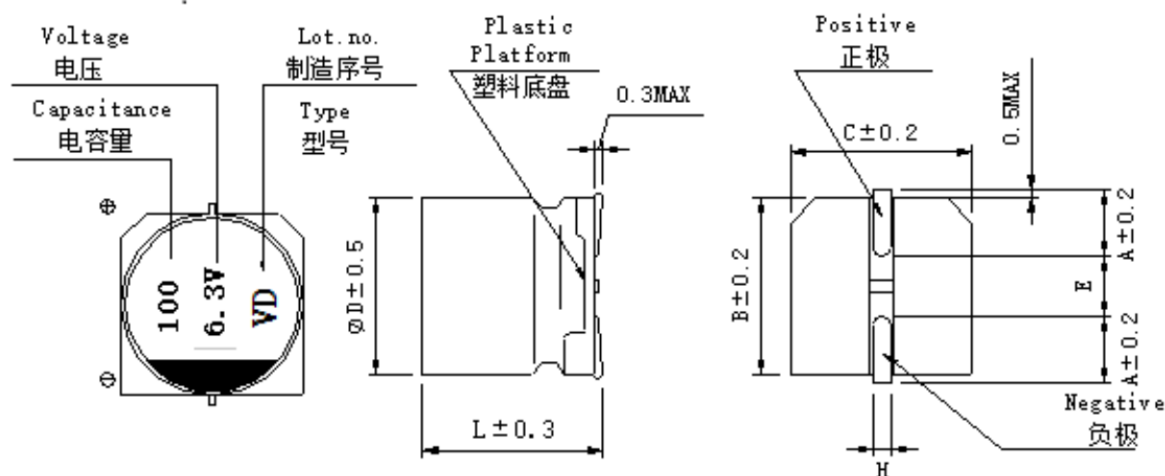
一、概述 SCOPE

本产品规格书适用 VD 型片式铝电解电容器产品。

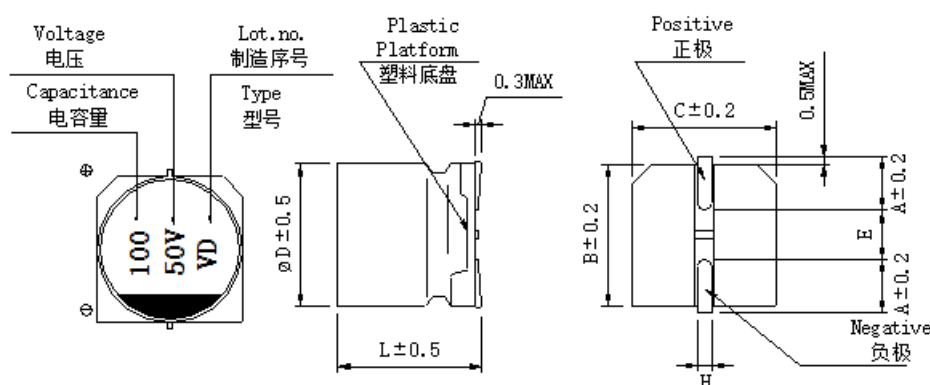
The product specification is adapted to series VD V-CHIP Aluminum Electrolytic Capacitors of

二、外形图及尺寸表 Case size table

1. $\phi 4 \sim \phi 6.3$



2. $\phi 8 \sim \phi 18$



单位:mm

	4 × 5.4	5 × 5.4	6.3 × 5.4	6.3 × 7.7	6.3 × 10.5	8 × 10.5	8 × 12.5	10 × 10.5	10 × 12.5	12.5 × 13.5	12.5 × 16.5	16 × 16.5	18 × 16.5	18 × 21.5	
A	1.8	2.1	2.4	2.4	2.4	2.9	2.9	3.2	3.2	4.8	4.8	5.8	6.8	6.8	
B	4.3	5.3	6.6	6.6	6.6	8.3	8.3	10.3	10.3	13	13	17	19	19	
C	4.3	5.3	6.6	6.6	6.6	8.3	8.3	10.3	10.3	13	13	17	19	19	
E	1.0	1.3	2.2	2.2	2.2	3.1	3.1	4.5	4.5	4.4	4.4	6.4	6.4	6.4	
L	5.4	5.4	5.4	7.7	10.5	10.5	12.5	10.5	12.5	13.5	16.5	16.5	16.5	21.5	
H	0.5~0.8					0.8~1.1					1.1~1.4				

三、 技术性能 Specifications

项目 Items	特性 Characteristics						
工作温度范围 Operating Temperature Range	-55°C ~ 105°C						
额定电压范围 Rated Voltage Range	6.3 V ~ 50V						
标称容量范围 Nominal Capacitance Range	1 ~ 8200 μF						
标称容量允许偏差 Nominal Capacitance Tolerance	±20% (20°C, 120Hz)						
漏电流 Leakage Current	$I \leq 0.01C_R V_R$ or $3(\mu A)$, 取较大者 (施加额定电压 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 $3(\mu A)$ Whichever is greater (After 2 minutes' application of rated voltage) C_R : Nominal Capacitance (μF) U_R : Rated voltages (V)						
损耗角正切 (tgδ) Dissipation Factor (Max) 20°C, 120Hz	U_R (V)	6.3	10	16	25	35	50
	tgδ	0.26(0.28)	0.20(0.24)	0.16(0.20)	0.14(0.16)	0.12(0.14)	0.12(0.14)
	容量大于 1000uF 者, 每增加 1000uF, 其损耗角正切值增加 0.02, 注: () 为 φ8 以上的产品。 When nominal capacitance exceeds 1000uF, add 0.02 to the value above for each 1000uF increase						

四、称电容量、额定电压、额定纹波电流与外形尺寸对应表

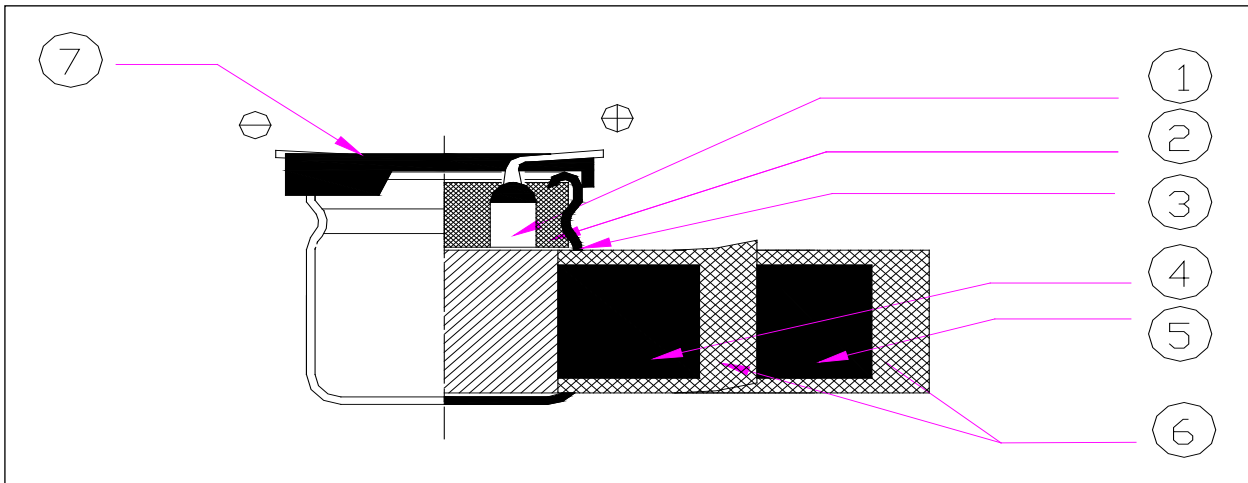
Nominal capacitance, rated voltage, rated ripple current and case size table

V μF	6.3			10			16			25			35			50		
	DxL mm	Impedance Ω	I- mA	DxL mm	Impedance Ω	I- mA	DxL mm	Impedance Ω	I- mA	DxL mm	Impedance Ω	I- mA	DxL mm	Impedance Ω	I- mA	DxL mm	Impedance Ω	I- mA
1.0																4x5.4	5.00	30
2.2																4x5.4	5.00	30
3.3																4x5.4	5.00	30
4.7													4x5.4	1.8	80	5x5.4	1.52	85
10										4x5.4	1.80	80	5x5.4	0.76	150	6.3x5.4	0.88	165
15							4x5.4	1.80	80	5x5.4	0.76	150	5x5.4	0.76	150	6.3x5.4	0.88	165
22				4x5.4	1.80	80	5x5.4	0.76	80	5x5.4	0.76	80	5x5.4	0.76	80	6.3x5.4	0.88	165
27	4x5.4	1.80	80	5x5.4	0.76	150	5x5.4	0.76	150	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x7.7	0.68	185
33	5x5.4	0.76	150	5x5.4	0.76	150	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x7.7	0.68	185
47	5x5.4	0.76	150	6.3x5.4	0.44	230	5x5.4	0.76	150	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x7.7	0.68	185
56	5x5.4	0.76	150	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x7.7	0.34	280	8x10.5	0.34	300
68	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x7.7	0.34	280	8x10.5	0.34	300
100	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x7.7	0.34	280	6.3x7.7	0.34	280	8x10.5	0.34	300
													8x10.5	0.17	300			
150	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x7.7	0.34	280	8x10.5	0.17	450	8x10.5	0.17	450	10x10.5	0.18	550
220	6.3x5.4	0.44	230	6.3x5.4	0.44	230	6.3x7.7	0.34	280	8x10.5	0.17	450	8x10.5	0.17	450	10x10.5	0.18	550
				6.3x7.7	0.34	280												
330	6.3x7.7	0.34	280	8x10.5	0.17	450	8x10.5	0.17	450	8x10.5	0.17	450	10x10.5	0.09	670	10x10.5	0.18	550
470	8x10.5	0.17	450	8x10.5	0.17	450	10x10.5	0.09	670	10x10.5	0.09	670	10x10.5	0.09	670	12.5x13 .5	0.12	650
680	8x10.5	0.17	450	10x10.5	0.09	670	10x10.5	0.09	670	10x10.5	0.09	670	12.5x13. 5	0.07	820	16x16.5	0.073	1000
1000	8x10.5	0.17	450	10x10.5	0.09	670	10x10.5	0.09	670	12.5x13.5	0.07	820	16x16.5	0.054	1260	18x16.5	0.066	1500
1500	10x10.5	0.09	670	12.5x13. 5	0.07	820	12.5x13. 5	0.07	820	12.5x16.5	0.06	950	18x16.5	0.048	1500	18x21.5	0.05	1620
2200	12.5x13 .5	0.07	820	12.5x16. 5	0.06	950	12.5x16. 5	0.06	950	16x16.5	0.054	1260	18x21.5	0.038	1750			
3300	12.5x16 .5	0.06	950	16x16.5	0.054	1260	16x16.5	0.054	1260	18x21.5	0.038	1750						
4700	16x16.5	0.054	1260	16x16.5	0.054	1260	18x16.5	0.048	1500									
6800	18x16.5	0.048	1500	18x16.5	0.048	1500												
8200	18x21.5	0.038	1750	18x21.5	0.038	1750												

I-=Rated ripple current (mA) (105°C, 100KHz) I-=额定纹波电流 (mA) (105°C, 100KHz)

 20°C 100KHz 时的电阻 (Ω) MAX

五、构造图及材料表 Frame drawing and materials



序号 No.	部件名称 Parts	材料名称 Material	主要供应厂家名称 Main supply Factory
1	引出线	铝线 LG3+镀锡铜钢线 AL- wire LG3+Tin- plating of copper cover steel	南通全用电子工业有限公司 NANTONG GENENIC ELECTRONIC INDUSTRY CO., LTD
2	橡胶塞	丁基橡胶 IIR rubber	苏州毅丰橡胶工业有限公司 YUFENG RUBBER INDUSTRY CO, LTD.
3	PE 铝壳 PE- CASE	99.5%纯度铝 AL - 99.5%	韶关源康机电有限公司 SHAOGUAN YUANKANG ELECTRICAL CO., LTD
4	阳极箔 AL - foil(+)	99.99%或 99.98%形成铝 箔 Formed AL 99.98% or 99.98%	杰希希电子科技(常熟)有限公司 JCC ELECTRONICS TECHNOLOGY (CHANGSHU) CO., LTD
5	阴极箔 AL - foil(-)	99.7%铝箔 Etched AL 99.7%	博罗冠业电子有限公司 AFT ELECTRONIC CO. LTD. BOLUO
6	电解纸 Separstor paper	电解电容器纸 Electrolytic Capacitor paper	上海铃茂新能源科技有限公司(大福) DAI FUKU PAPER MFG. CO, LTD
7	座板 BASE	PPS	南通新联电子有限公司 NANTONG Xinlian ELECTRONIC CO. LTD.

六、试验方法及要求 Tests

1	系列号(SERIES)	VD 系列(VD SERIES)						
2	额定电压 (rated voltage)	6.3~50V						
3	工作温度范围 Operating temperature range operating	工作温度范围是指电容器在额定电压下能持续工作的所允许外部环境的温度范围 operating temperature range is the range of ambient temperature at which the capacitor can be operated continuously at rated voltage SPEC:-55~+105°C						
4	电容容量 capacitance	测量等效电路图 measuring circuit equivalent series circuit						
		测量温度 20°C	measuring temperature					
		测量频率 120HZ	measuring frequency					
		测量电压 0.5Vrms	measuring voltage					
	标称电容容量允许偏差:±20% MAX	Nominal Capacitance Tolerance:±20% MAX						
5	损耗角正切 tangent of the loss angle	损耗角正切的测量应要和测量电容容量一样的条件下进行 Measurement should be made under the same conditions as those given for the measurement of capacitance SPEC:						
	损耗角正切 (tgδ)	U _R (V)	6.3	10	16	25	35	50
		tgδ	0.26	0.20	0.16	0.14	0.12	0.12
6	漏电流 leakage current	将额定电压加在电容和 1000±100 Ω 的保护电阻上。在充电 2 分钟后，按下列等式计算漏电流 the rated voltage shall be applied across the capacitor and its protective resistor which shall be 1000±100Ω.The leakage current shall be then measured after an electrifications period of (A)min. The leakage current shall be calculated by the following equation 在加上额定电压一定时间后，应满足下列要求：I≤0.01CV or 3μA Which is greater(取较大者) (20°C, 2 分钟) SPEC: The following specifications shall be satisfied when the rated voltage is applied for the required time.						
7	允许最大纹波电流 Maximum permissible ripple current	在规定的某一频率下的最大交流电流，在该电流下电容器连续工作。即使在测过第 16 项下的耐久性后，此要求仍要满足。在此，DC 电压加上最大纹波电压小于等于额定电压。 The maximum sinusoidal alternating current of a frequency specified below, at which the capacitor can be operated continuously. This requirement shall be satisfied even after the measurement of clause 16(electrical endurance) Where(DC voltage +peak ripple voltage)≤rated voltage						

接上表

8	温度特性 Characteristics of temperature	<table border="1"> <thead> <tr> <th>步骤 step</th> <th>温度 temperature</th> <th>持续时间 Duration</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20±2℃</td> <td>15 分钟 15 min</td> </tr> <tr> <td>2</td> <td>最低工作温度 minimum operating temperature</td> <td>2 小时 2 hours</td> </tr> <tr> <td>3</td> <td>20±2℃</td> <td>15 分钟 15 min</td> </tr> <tr> <td>4</td> <td>最高工作温度 maximum operating temperature</td> <td>2 小时 2 hours</td> </tr> </tbody> </table> <p>步骤 1: 测量容量, 损耗角正切和阻抗 Step1: Capacitance, tangent of the loss angle impedance shall be measured.</p> <p>步骤 2: 在电容器存放 2 小时后, 测量容量, 损耗角正切和阻抗 Step2: After the capacitor being stored for 2hours, Capacitance, tangent of the loss angle and impedance shall be measured.</p> <p>步骤 3: 电容器在 20±2℃下存放 15 分钟 Step3: The capacitor being stored fro 15min at20±2℃</p> <p>步骤 4: 在电容器存放 2 小时后, 测量容量和漏电流。 Step4: After the capacitor being stored for 2hours, capacitance and leakage current shall be measured</p> <table border="1"> <thead> <tr> <th>额定电压 rated voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z(-25 ℃/20 ℃)</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40 ℃/20 ℃)</td> <td>5</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table>	步骤 step	温度 temperature	持续时间 Duration	1	20±2℃	15 分钟 15 min	2	最低工作温度 minimum operating temperature	2 小时 2 hours	3	20±2℃	15 分钟 15 min	4	最高工作温度 maximum operating temperature	2 小时 2 hours	额定电压 rated voltage	6.3	10	16	25	35	50	Z(-25 ℃/20 ℃)	3	2	2	2	2	2	Z(-40 ℃/20 ℃)	5	4	4	3	3	3
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Z(-40 ℃/20 ℃)	5	4	4	3	3	3																																
9	浪涌测试 Surge test	<p>在规定温度下, 循环测试 1000 次, 每次充电 30±5 秒, 在放电大约 5 分 30 秒。在标准温度条件下存放使其稳定, 然后测试。</p> <p>The capacitor shall be subjected to 1000cycles at a temperature specified below, each consisting of a charge period of 30±5sec, followed by a discharge period of approx. 5min30sec. And the capacitor shall be stored under standard conditions thermal to obtain stability,after which measurements shall be made.</p> <p>measurement circuit(测试电路图)</p> <table border="1"> <tr> <td rowspan="4"> </td> <td>VS: 浪涌电压 Surge voltage</td> <td>V1: 直流电压 DC voltmeter</td> </tr> <tr> <td>R1: 保护电阻 (1KΩ) Protective series resistor</td> <td>R2: 放电电阻器 Discharge resistor</td> </tr> <tr> <td>CX: 测试电容 Test capacitor</td> <td>S: 开关 Switch</td> </tr> <tr> <td></td> <td></td> </tr> </table> <p>SPEC: 1) $\Delta C/C \leq 15\%$ 2) $\text{tg } \delta < \text{规定值}$ 3) 电压</p> <table border="1"> <thead> <tr> <th>RATED VOLTAGE(V_{DC})</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <th>SURGE VOLTAGE(V_{DC})</th> <td>8</td> <td>13</td> <td>20</td> <td>32</td> <td>44</td> <td>63</td> </tr> </tbody> </table>		VS: 浪涌电压 Surge voltage	V1: 直流电压 DC voltmeter	R1: 保护电阻 (1KΩ) Protective series resistor	R2: 放电电阻器 Discharge resistor	CX: 测试电容 Test capacitor	S: 开关 Switch			RATED VOLTAGE(V _{DC})	6.3	10	16	25	35	50	SURGE VOLTAGE(V _{DC})	8	13	20	32	44	63													
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接上表

10	端子强度 Terminal strength	<p>1) 拉力(tensile)</p> <table border="1" data-bbox="464 293 1449 465"> <thead> <tr> <th>d(mm)</th> <th>[N]</th> <th>Duration time</th> </tr> </thead> <tbody> <tr> <td>0.3<d≤0.5</td> <td>5</td> <td rowspan="3">10±2sec(秒)</td> </tr> <tr> <td>0.5<d≤0.8</td> <td>10</td> </tr> <tr> <td>0.8<d≤1.25</td> <td>20</td> </tr> </tbody> </table> <p>2) 抗弯强度 (Bending) 端子应该在每一方向上折弯一次，总共两次 The terminal shall be subjected to 1 bend in each direction to give a total 2 bends.</p> <table border="1" data-bbox="464 591 1449 763"> <thead> <tr> <th>d(mm)</th> <th>[N]</th> </tr> </thead> <tbody> <tr> <td>0.3<d≤0.5</td> <td>2.5 (0.25KG)</td> </tr> <tr> <td>0.5<d≤0.8</td> <td>5.0 (0.51KG)</td> </tr> <tr> <td>0.8<d≤1.25</td> <td>10.0(1.0KG)</td> </tr> </tbody> </table> <p>端子没有破损或松动 SPEC: No breaking and loosening of terminal</p>	d(mm)	[N]	Duration time	0.3<d≤0.5	5	10±2sec(秒)	0.5<d≤0.8	10	0.8<d≤1.25	20	d(mm)	[N]	0.3<d≤0.5	2.5 (0.25KG)	0.5<d≤0.8	5.0 (0.51KG)	0.8<d≤1.25	10.0(1.0KG)
d(mm)	[N]	Duration time																		
0.3<d≤0.5	5	10±2sec(秒)																		
0.5<d≤0.8	10																			
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0.8<d≤1.25	10.0(1.0KG)																			
11	可焊性 solderability	<p>焊料(Solder) : H60A. H60S or(或)H63A 焊接温度(Solder temperature) : 245±2℃ 浸入时间(Immersion time) : 3±0.5sec(秒) 浸入深度(Immersion depth) : 2mm 熔化: 松香在酒精的浓度是 25% Flux: 25% by weight of rosin in ethanol 从含浸处到顶部，至少要有 3/4 的部分覆盖有新焊料 SPEC:1)3/4 of the circumference of the surface up to the immersed shall be covered with new solder.</p>																		
12	耐焊接热 Resistance to soldering heat	<p>焊料(Solder) : H60A. H60S or(或)H63A 焊槽温度(Solder temperature) : 260±5℃(or 或 350±10℃ 浸入时间(Immersion time) : 10±1sec(秒) (or 或 3.5±0.5sec) 绝热屏蔽板的厚度 (Thickness of heat shunt:1.6mm) : 1.6mm SPEC:1) 电容量变化 Change in capacitance: ±10%初始值以内 Within±10% of the initial value 2) 损耗角正切 tangent of the loss angle: 小于等于初始规定值 The initial specified value or less 3) 漏电流 leakage current: 小于等于初始规定值 The initial specified value or less</p>																		
13	抗振性 Vibration	<p>试验电容器的耐振性。在整个频率范围内，从 10 赫兹到 55 赫兹，然后再返回到 10 赫兹，就这样在一分钟内往返循环。振幅为 1.5mm。在三个垂直方向上，每一方向要持续 2 小时，总共 6 小时 Only endurance conditioning by sweeping shall be made. The entire frequency range, from 10 to 55Hz and return to 10Hz, shall be transversed in 1min. Amplitude(total excursion)1.5mm, This motion shall be applied for a period of 2hours in each of 3 mutually perpendicular directions(a total of 6 hours) SPEC:1) 电容量的变化(change in capacitance) : ±5%初始值以内(within ±5%of the initial value) 2) 无可见损伤(No visible damage)</p>																		

接上表

14	<p>稳态湿热 Damp heat</p>	<p>电容器要在温度 $40\pm 2^{\circ}\text{C}$，相对湿度 90%到 95%条件下存放 240 ± 8 个小时。然后在标准条件下放 1 到 2 小时后进行测量。</p> <p>the capacitor shall be stored at a temperature of $40\pm 2^{\circ}\text{C}$ and relative humidity of 90 to 95% for 240 ± 8 hours. And then the capacitor shall be subjected to standard atmospheric conditions for 1 to 2 hours, after which measurements shall be made</p> <p>SPEC:1) 电容量的变化 change in capacitance: $\pm 15\%$初始值以内 within $\pm 15\%$ of the initial value;</p> <p>2) 损耗角正切 tangent of loss angle: 小于等于初始规定值 The initial specified value or less;</p> <p>3) 漏电流 leakage current: 小于等于初始规定值 The initial specified value or less</p>
15	<p>高温储存 shelf life</p>	<p>在 105°C 温度下不外加电压贮存，电容器存放 1000 小时。然后在标准条件下放 1 到 2 小时后进行测量，并且在测漏电流前，必须满足下列条件。The capacitor shall be stored at 105°C temperature specified below for 1000 hours. During which time no voltage shall be applied. And then the capacitor shall be subjected to standard atmospheric conditions for 1 to 2 hours, after which measurements shall be made, Prior to the measurement of leakage current, following conditioning may be made.</p> <p>SPEC:1) 电容量的变化 change in capacitance: $\pm 30\%$初始值以内 within $\pm 30\%$ of the initial value;</p> <p>2) 损耗角正切 tangent of loss angle: $\pm 300\%$初始规定值以内 within $\pm 300\%$ of the initial value;</p> <p>3) 漏电流 leakage current: 小于等于初始规定值 The initial specified value or less</p>
16	<p>耐久性 load life</p>	<p>+105 施加额定电压条件，电容器应满足以下要求： $\Phi D=4, 5$ 和 6.3 为 2000 小时； $\Phi D=8, 10$ 为 5000 小时； $\Phi D=12.5, 16$ 和 18 为 8000 小时 $\Phi D=4, 5$ and 6.3: 2000H; $\Phi D=8, 10$: 5000H; $\Phi D=12.5, 16$ and 18: 8000H;</p> <p>application of rated voltage at 105°C, the capacitor shall meet the following requirement: SPEC:1)</p> <p>电容量的变化 change in capacitance: $\pm 30\%$初始值以内 within $\pm 30\%$ of the initial value;</p> <p>2) 损耗角正切 tangent of loss angle: $\pm 300\%$初始规定值以内 within $\pm 300\%$ of the initial value;</p> <p>3) 漏电流 leakage current: 小于等于初始规定值 The initial specified value or less</p>

七、标志 Marking (见外形图及尺寸表)

说明：标识中的“VD”是 VD 型贴片产品的专属标识。

Information: The mark of “VD” is the special mark of VD for SMD Type of

八、铝电解电容器产品编码体系表

Product symbol system for Aluminum Electrolytic Capacitors

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Series Code		Voltage (WV)		Capacitance (μF)			Tolerance	Size Code			Terminal Code	Brand	Sleeve	Base	Other		

填写品种
览表的系
列名称
Fill in
Code Of
Variety list

例:

Series	Code
VT	VT
JVT	JVT

Voltage	Code	Cap (μF)	Code	Tolerance (%)	Code	ΦD	Code	L	Code	Brand	Code	Base	Code
4	OQ	0.1	0R1	+5	J	3	A	5	050	LH	L	PPA	P
6.3	0J	0.22	R22	-5	K	4	B	5.4	054	Series			
10	1A	0.33	R33	+10		5	C	7.7	077				
16	1C	0.47	R47	-10	6	D	9	090					
25	1E	1	010	+15	6.3	E	10.5	105					
35	1V	2.2	2R2	-15	8	F	12.5	125					
50	1H	3.3	3R3	+20	10	G	13.5	135					
63	1J	4.7	4R7	-20	12	H	14	140					
80	1K	10	100	+20	12.5	I	16.5	165					
100	2A	22	220	-20	13	J	21.5	215					
125	2B	47	470	+20	14	K	25	250					
160	2C	100	101	-0	16	L	30	300					
180	2Z	220	221	+20	18	N	35	350					
200	2D	330	331	-10	19	M	40	400					
220	2P	390	391	+30	20	O	45	450					
250	2E	470	471	-0	22	P	50	500					
315	2F	560	561	+30	25.4	Q	55	550					
330	2U	1000	102	-30	30	R	60	600					
350	2V	2200	222	+10	35	S							
400	2G	3300	332	+30	40	T							
420	2M	4700	472	-10	50	U							
450	2W	10000	103	+20	50.8	V							
500	2H	22000	223	-15	63.4	W							
					76	X							
					89	Y							

说明：系列别为二个英文字母时（如 VT 系列），此处代号为：000

例：VT 16V100 6.3*5.4 其料号编码为：VT1C101ME054000LPO

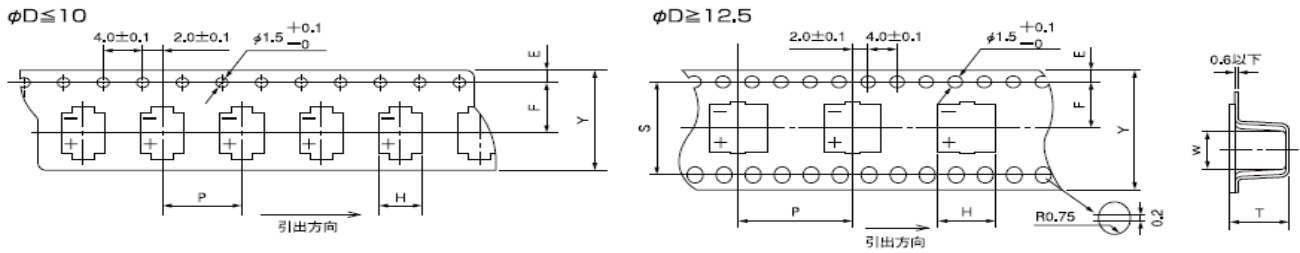
系列别为三个英文字母时（如 JVT 系列），此处代号为：00

例：JVT 400V10 10*12.5 其料号编码为：JVT2G100MG12500LPO

九、片式铝电解电容的编带

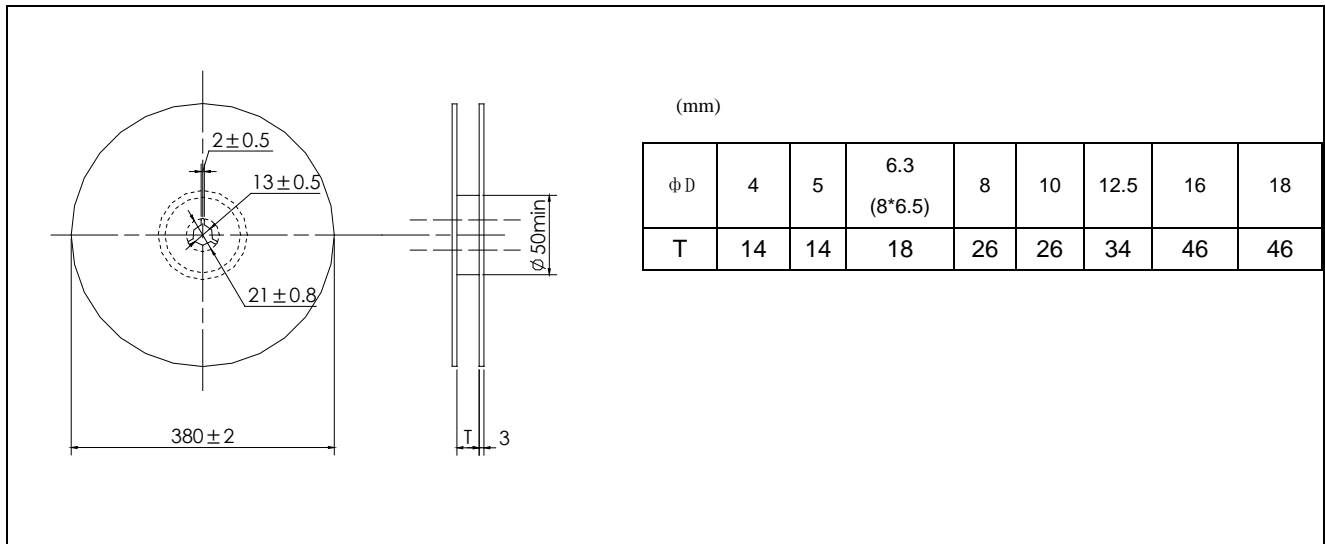
V-Chip Type Aluminum Electrolytic Capacitors

编带 Carrier tape



$\phi D \times L$	4x5. 4	5x5.4	6.3x 5.4	6.3x 7.7	6.3* 10.5	8x 10.5	8x 12.5	10x 10.5	10x 12.5	12.5x 13.5	12.5x 16.5	16x 16.5	18x 16.5	18x 21.5	(mm)
W	12.0	12.0	16.0	16.0	16.0	24.0	24.0	24.0	24.0	32.0	32.0	44.0	44.0	44.0	
P	8.0	12.0	12.0	12.0	12.0	16.0	16.0	16.0	16.0	24.0	24.0	28.0	32.0	32.0	
F	5.5	5.5	7.5	7.5	7.5	11.5	11.5	11.5	11.5	14.2	14.2	20.2	20.2	20.2	
A_0	5.0	6.0	7.0	7.0	7.0	8.7	8.7	10.7	10.7	13.2	13.2	17.5	19.5	19.5	
B_0	5.0	6.0	7.0	7.0	7.0	8.7	8.7	10.7	10.7	13.2	13.2	17.5	19.5	19.5	
T_2	5.8	5.8	5.8	8.0	11.0	11.0	13.3	11.0	13.3	14.3	17.3	17.3	17.8	22.5	

■ 编带包装盘 Reel



(mm)

ϕD	4	5	6.3 (8*6.5)	8	10	12.5	16	18
T	14	14	18	26	26	34	46	46

■ Package quantity 包装数量

Φ D×L	Quantity / Reel 数量 / 每盘	pcs/ Small packing box 数量/小包装箱	pcs/Large packing box 数量/大包装箱
4×5.4	2000pcs	24000pcs	48000pcs
5×5.4	1000pcs	12000pcs	24000pcs
6.3×5.4、6.3×7.7、8×6.5	1000pcs	10000pcs	20000pcs
8×10.5、10×10.5	500pcs	3500pcs	7000pcs
6.3×10.5	800pcs	8000pcs	16000pcs
8×12.5	400pcs	2800pcs	5600pcs
10×12.5	400pcs	2800pcs	5600pcs
12.5×13.5	250pcs	2500pcs	5000pcs
12.5×16.5	200pcs	800pcs	1600pcs
16×16.5	200pcs	800pcs	1600pcs
18×16.5	175pcs	700pcs	1400pcs
18×21.5	125pcs	500pcs	1000pcs