承 认 书

APPROVAL SHEET

客户名称 Customer Name	
客户料号 Customer P/N	
产品名称 Product Name	贴片型铝电解电容 Chip Aluminum Electrolytic Capacitor
型号规格 Specification	JVJ 35V 680μF 10X10.5
厂商料号 Vendor P/N	JVJ35V680M10X10
发行日期 Issue Date	2026/03/10

发行单位 ISSUED EPARTMENT	
制作 PREPARED BY	贺金欢 HE JIN HUAN
批准 APPROVED	李伟业 LI WEI YE

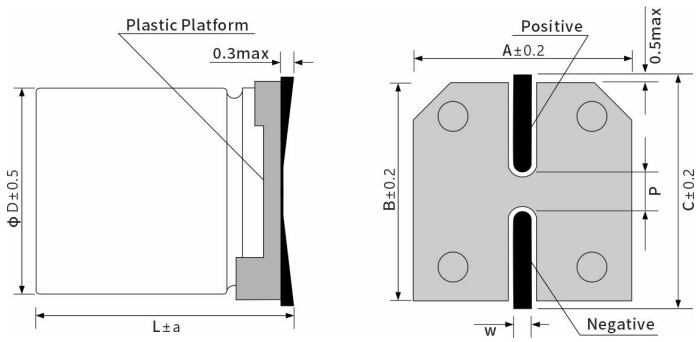
客户承认 APPROVED COLUMN	
□合格 □不合格	
审核 CHECKED	
批准 APPROVED	

贵司确认后，敬请回签一份（After your confirmation, please sign back）

变更履历表
Change Record

序号 No.	日期 Date	版本号 Version No	修订记录 Revision records	校订者 Reviser
1	2026-03-10	A0	新版发行	贺金欢

1.外形尺寸图 Dimensions



D	L	A	B	C	P	a	W
4	5.7	4.3	4.3	5.0	1.0	±0.5	0.5-0.8
5	5.7	5.3	5.3	6.0	1.5	±0.5	0.5-0.8
6.3	5.7	6.6	6.6	7.3	2.0	±0.5	0.5-0.8
6.3	7.7	6.6	6.6	7.3	2.0	±0.5	0.5-0.8
8	10.5	8.3	8.3	9.0	3.1	±0.5	0.7-1.2
10	10.5	10.3	10.3	11.0	4.7	±0.5	0.7-1.2
12.5	13.5	13.0	13.0	14.0	4.7	±1.0	1.0-1.4

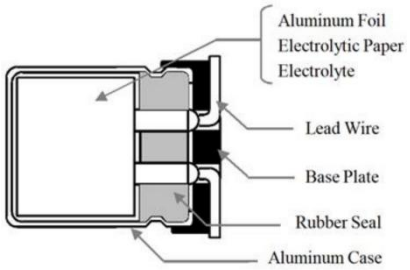
2.规格特性表 Specification and Characteristics Table

料号 Part Number	参数 Parameter	单位 unit	条件 condition
系列 Series	JVJ	-	-
标称容量 Cap.	680	μF	-
额定电压 R.V.	35	V	-
尺寸 Size DXL	10X10.5	mm	-
容差 Tolerance	-20~+20	%	-
损失角 DF (max)	16	%	120Hz
漏电流 LC(max)	238	μA	120S
阻抗 ESR(max)	N/A	Ω	100KHz
纹波电流 R.C.(max)	375	mA	120Hz/105℃
浪涌电压 S.V.	75	V	-
寿命 Life	2000	hrs	105℃
工作温度 Temp.	-40~105	℃	-

3.纹波电流补正系数 Multiplier for Ripple Current

频率 Freq. / 容值 Cap.	50Hz	120Hz	1kHz	10kHz up
Under 100	0.70	1.00	1.35	1.50
100~2200μF	0.80	1.00	1.20	1.30

4.材料表 Material Table



序号 NO.	构成部件 Component	材质成分 Material
1	铝箔 Aluminum Foil	铝 Aluminum
2	电解纸 Electrolytic Paper	马里拉麻/西班牙草纸浆 Manila Hemp/Esparto pulp
3	电解液 Electrolyte	γ -丁内酯 Gamma-Butyrolactone
4	涂膜铝壳 Aluminum Case	铝及 PET Aluminum&PET
5	封口橡胶 Rubber Seal	树脂橡胶 Synthetic Rubber
6	引线 Lead Wire	镀锡铜包钢线 Tinned Copper-Clad Steel Wire
7	底座 Base Plate	热塑性树脂 Thermoplastic Resin

5.编带规格 Tape and Reel Specifications

Fig01

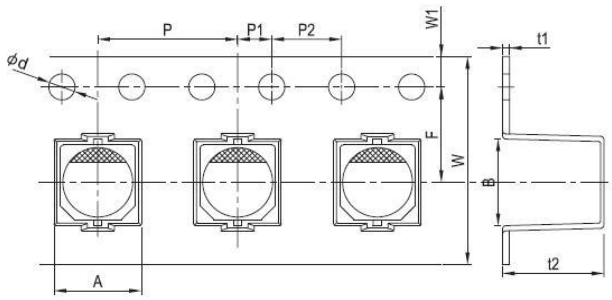
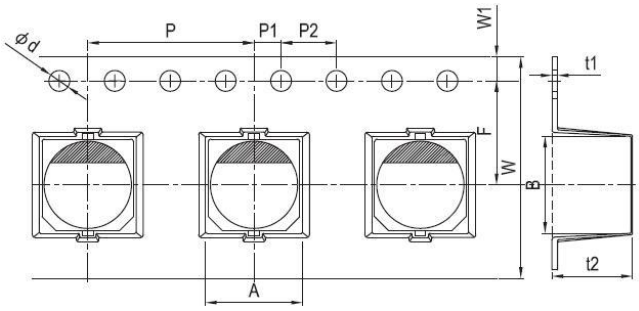
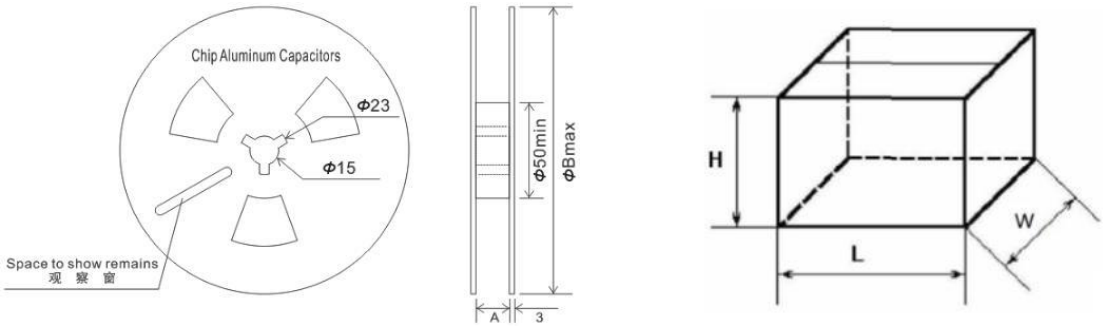


Fig02



产品尺寸 Size	W	W1	F	P	P1	P2	A	B	t1	t2	备注 Note
误差 Error	±0.3	±0.15	±0.1	±0.1	±0.1	±0.1	±0.2	±0.2	±0.1	±0.2	
Φ4x5.7	12	1.75	5.5	8	2	4	4.7	4.7	0.4	6.3	Fig01
Φ5x5.7	12	1.75	5.5	12	2	4	6	6	0.4	6.3	
Φ6.3x5.7	16	1.75	7.5	12	2	4	7	7	0.4	6.3	
Φ6.3x7.7	16	1.75	7.5	12	2	4	7	7	0.4	8.3	
Φ8x10.5	24	1.75	11.5	16	2	4	8.7	8.7	0.4	11	Fig02
Φ10x10.5	24	1.75	11.5	16	2	4	10.7	10.7	0.4	11	
Φ12.5x13.5	32	1.75	14.2	24	2	4	14	14	0.5	14.1	

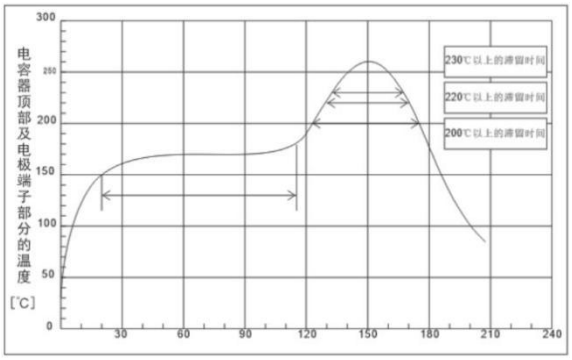
6.包装 Packing



ΦDXL	卷装数量 Qty./Reel	盒装数量 Qty./Bag	A±0.3(mm)	B±2(mm)	外箱尺寸(L*W*H)
Φ4x5.7	2000	24000	14	382	395x395x235
Φ5x5.7	1000	12000	14	330	395x395x235
Φ6.3x5.7	1000	10000	18	330	395x395x235
Φ6.3x7.7	1000	10000	18	382	395x395x235
Φ8x10.5	500	3500	26	382	395x395x235
Φ10x10.5	500	3500	26	382	395x395x235
Φ12.5x13.5	250	1500	34	382	395x395x235

7.焊接条件 Welding Conditions

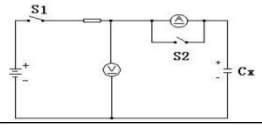
1. 当使用回流焊，在玻璃环氧树脂基板上进行焊接的时候，产品顶部及端子部分温度，时间的推荐范围如下表所示。
When using reflow soldering for soldering on glass epoxy substrates, the recommended ranges of temperature and duration for the product top and terminal areas are as shown in the following table.
2. 推荐回流次数不超过 2 次。
The recommended number of reflow cycles shall not exceed 2.
3. 如需要第 2 次焊接，请在第 1 次回流之后，必须确保电容器的温度已经完全冷却到室温(5~35℃)后方可进行第 2 次回流。
If a second soldering is required, after the first reflow process, it is mandatory to ensure that the capacitor has been completely cooled down to room temperature (5~35℃) before proceeding with the second reflow.



备注：
1. 温度上升平均每秒钟最多 5℃；
The average temperature rise shall not exceed 5℃ per second.
2. 温度下降平均每秒钟最多 6℃；
The average temperature drop shall not exceed 6℃ per second.
3. 从 25℃上升到峰值温度的时间最多 6 分钟；
The time to rise from 25℃ to the peak temperature shall not exceed 6 minutes.

	预热时间 PH Time	Time Above 200°C	Time Above 217°C	Time Above 230°C	温度峰值 Peak Temp	回流焊次数 Reflow Cycles
Φ4~6.3	120°C~180°C 120 sec.Max.	90 sec.max.	70 sec.max.	50 sec.max.	260°C max.	≤2
Φ8~10		90 sec.max.	60 sec.max.	40 sec.max.	250°C max.	≤2
Φ8x6.5		70 sec.max.	60 sec.max.	30 sec.max.	245°C max.	≤2
160v~450v		60 sec.max.	50 sec.max.	30 sec.max.	240°C max.	≤2
Φ12.5~20		60 sec.max.	40 sec.max.	30 sec.max.	240°C max.	≤2
125°C type		60 sec.max.	40 sec.max.	30 sec.max.	250°C max.	≤2

8.测试与试验项目 Test Item

No.	项 目 Items	条 件 Conditions	判 定 Decide
1	静电容量 Capacitance	测试回路：串联等效电路 Test Circuit: Series Equivalent Circuit	静电容量允许偏差：≤参考规格参数 Capacitance tolerance：≤Refer to the SPEC TABLE
2	损失角正切值 Dissipation Factor	测试频率：120Hz Test Frequency: 120Hz 测试电压:≤ 0.5Vrms Test Voltage:≤ 0.5Vrms	参考规格参数 Refer to the SPEC TABLE
3	泄漏电流 Leakage Current	在下图测试回路中电容器两端施加额定工作电压，并串联 1000±10Ω电阻，在施加 2 分钟后，测量漏电流。In the test circuit shown in the figure below, apply the rated operating voltage across the capacitor and connect a 1000±10Ω ohm resistor in series. After maintaining the voltage application for 2 minutes, measure the leakage current. 	参考规格参数 Refer to the SPEC TABLE
4	浪涌电压 Surge Voltage	在以 30 秒充电、5.5 分钟放电的循环速率下施加浪涌电压，进行 1000 次连续测试循环。 测试温度：15~35°C After surge voltage applied at a cycling rate of 30 seconds charge and 5.5 minutes discharge 1000 successive test cycle. Test temperature:15~35°C	容量变化率：初始值的±20%以内 ΔC/C≤±20% initial specified value 损失角正切值：不大于 1.75 倍规格值 DF:Not exceeding 1.75 times the specified value 泄漏电流：不大于规格值 LC≤ Initial specified value 外观：无明显异常 Appearance: No significant abnormalities
5	高温贮存 Shelf Life	温度：上限温度 Temperature：Upper limit temperature 时间 Time：1000h	容量变化率：初始值的±30%以内 ΔC/C≤±30% initial specified value 损失角正切值：不超过 3 倍规格值 DF≤300% initial specified value 泄漏电流：不大于规格值 LC≤ Initial specified value 外观：无明显异常 Appearance: No significant abnormalities

6	耐久性 Load Life	电容依照额定寿命在上限温度下施加额定电压及纹波电流，待其恢复室温后进行测量。 In accordance with its rated life conditions, apply the rated voltage and ripple current to the capacitor under the upper limit temperature. Conduct the measurement after the capacitor returns to room temperature.	容量变化率：初始值的±30%以内 ΔC/C≤±30% initial specified value 损失角正切值：不超过 3 倍规格值 DF≤300% initial specified value 泄漏电流：不大于规格值 LC≤ Initial specified value 外观：无明显异常 Appearance: No significant abnormalities

8.测试与试验项目 Test Item

<table>
<tr><th>No.</th><th>项 目
Items</th><th>条 件
Conditions</th><th>判 定
Decide</th></tr>
<tr><td>7</td><td>温度特性
Temperature Characteristics</td><td>
<table>
<tr><th>阶段
Stage</th><th>测试温度
Test temp.</th><th>时间
Time</th></tr>
<tr><td>1</td><td>20±2</td><td rowspan="5">时间达到热稳定时
When thermal stability is achieved</td></tr>
<tr><td>2</td><td>-25±3</td></tr>
<tr><td>3</td><td>-55±3</td></tr>
<tr><td>4</td><td>20±2</td></tr>
<tr><td>5</td><td>+105±3</td></tr>
</table>
</td><td>
<table>
<tr><th>额定工作电压 DC</th><th>6.3</th><th>10</th><th>16</th><th>25</th><th>35</th><th>50</th><th>63</th><th>100</th></tr>
<tr><td>Z(-25℃)/Z(20℃)</td><td>5</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>3</td></tr>
<tr><td>Z(-55℃)/Z(20℃)</td><td>10</td><td>8</td><td>6</td><td>4</td><td>3</td><td>3</td><td>3</td><td>3</td></tr>
</table>
阻抗比：阶段 2、3 与阶段 1 的阻抗比不超过上表值
Impedance Ratio: The impedance ratio between Stages 2, 3 and Stage 1 shall not exceed the values in the above table
容量变化率：相对于阶段 1 值，不超过±25%
Capacitance Change: Relative to the value in Stage 1, it shall not exceed ±25%
损失角正切值：不超过 5 倍规格值
DF: Not exceeding 5 times the specified value
泄漏电流：不超过规格值
LC≤ Initial specified value</td></tr>
<tr><td>8</td><td>振动试验
Vibration Test</td><td>在振动试验台上每个方向各 2 小时，共 6 小时
2 hours in each direction on the vibration test bench, totaling 6 hours.
频率 Frequency：10~55Hz
振幅 Amplitude：1.5mm
振速：约 1 分钟由 10 到 55 再到 10 赫兹
Vibration frequency: Approximately 1 minute from 10 to 55 and back to 10 Hertz.</td><td>容量变化率：初始值的±5%以内
ΔC/C≤±5% initial specified value
外观：无明显异常
Appearance: No significant abnormalities</td></tr>
<tr><td>9</td><td>可焊性
Solderability</td><td>焊接温度：245±5℃
Soldering temperature: 245±5℃
浸入深度：1.5~2mm Dipping depth:1.5~ 2mm
浸入速度：25±2.5mm/s
Dipping speed: 25±2.5mm/s
浸入时间：3±0.5s Dipping time: 3±0.5s</td><td>焊料润湿试验表面 90%区域，焊锡应光亮均匀
A minimum of 90% of the surface being immersed</td></tr>
<tr><td>10</td><td>耐焊接热
Solder Heat Resistance</td><td>将产品放置在已经预热 250℃的端子板上，放入 250℃环境中 30 秒后取出，恢复至室温。
Place the product on a terminal block preheated to 250℃, then put it in a 250℃ environment for 30 seconds before taking it out. Allow the product to return to room</td><td>容量变化率：初始值的±10%以内
ΔC/C≤±10% initial specified value
损失角正切值：不大于规格值 DF≤ initial specified value
泄漏电流：不大于规格值 LC≤ Initial specified value
外观：无明显异常 Appearance: No significant abnormalities</td></tr>
</table>

		temperature.	
11	稳态湿热 Steady-State Damp Heat	温度 40±5℃，相对湿度 90~95%的环境中放置 240±8 小时后,在常温常湿中放置 1~2 小时后测量。 After being stored in an environment with a temperature of 40±5℃ and a relative humidity of 90~95% for 240±8 hours, measure the product after it is placed in normal temperature and humidity for 1~2 hours.	容量变化率：初始值的±20%以内 ΔC/C≤±20% initial specified value 损失角正切值：不超过 1.2 倍规格值 DF: Not exceeding 1.2 times the specified value 泄漏电流：不大于规格值 LC≤ Initial specified value 外观：无明显异常 Appearance: No significant abnormalities

8.测试与试验项目 Test Item

No.	项 目 Items	条 件 Conditions	判 定 Decide
12	温度快速变化 Rapid Temperature Change	电容器放置在冷热冲击箱中，温度按照"+25℃(3min)→-55℃(30min)→+25℃(3min)→+105℃(30min)→+25℃(3min)”一个循环变化周期，共 5 个循环后，在常温常湿中放置 1~2 小时后测量。 Place the capacitor in a thermal shock chamber. The temperature shall follow a cycle of "+25℃ (3min) → -55℃ (30min) → +25℃ (3min) → +105℃ (30min) → +25℃ (3min)". After 5 complete cycles, measure the capacitor after it is placed in normal temperature and humidity for 1~2 hours.	容量变化率：初始值的±10%以内 ΔC/C≤±10% initial specified value 损失角正切值：不大于规格值 DF≤ initial specified value 泄漏电流：不大于规格值 LC≤ Initial specified value 外观：无明显异常 Appearance: No significant abnormalities
13	防爆 Explosion Protection	a)交流电源测试法 AC Power Supply Test Method 电容两端施加 50 或者 60 赫兹 0.7 倍额定电压，或者 250V 交流电压，取最小值。 Apply an AC voltage of 0.7 times the rated voltage at 50 or 60 Hz, or 250V AC, whichever is lower. b)直流电源测试法 DC Power Supply Test Method 直径小于等于 22.4mm，施加 1A 电流；直径大于 22.4mm，施加 10A 电流反向直流电压。 Apply a reverse DC voltage with a current of 1A for capacitors with a diameter of ≤22.4mm; apply a reverse DC voltage with a current of 10A for those with a diameter of >22.4mm.	防爆阀开启，不应发生有火焰；如果施加电压 30 分钟内部防爆阀不开启，也认为性能满足要求。 When the explosion-proof valve opens, no flame shall occur; if the internal explosion-proof valve does not open within 30 minutes of voltage application, the performance shall also be deemed to meet the requirements.

9.铝电解电容使用注意事项 Precautions for Using Aluminum Electrolytic Capacitors

1. 铝电解电容是有极性的，请按正确的极性使用。当反向接入线路时，会导致回路短路或电容损坏。当回路的有可能反向或极性不明时，请使用无极性电容。

Aluminum electrolytic capacitors are polarized and shall be used with the correct polarity. Reverse connection in the circuit will result in short circuit or capacitor damage. If there is a possibility of reverse polarity or unclear polarity in the circuit, non-polarized capacitors shall be used.

2. 不要施加反向电压或超过额定电压的直流电压，当施加电压超过额定电压时，漏电流会显著增加导致电容损坏。推荐在额定电压下使用以保证寿命，浪涌电压是电容能短时间承受的最高电压。

Do not apply reverse voltage or DC voltage exceeding the rated voltage. When the applied voltage exceeds the rated voltage, the leakage current will increase significantly, leading to capacitor damage. It is recommended to use the capacitor at the rated voltage to ensure service life. Surge voltage refers to the maximum voltage that the capacitor can withstand for a short period.

3. 纹波电流应小于额定值。施加纹波电流超过额定值后，会导致电容器本体过热，容量下降，寿命缩短。所施加纹波电压的峰值与直流电压之和应小于额定工作电压。

The ripple current shall be less than the rated value. Applying a ripple current exceeding the rated value will cause the capacitor body to overheat, resulting in reduced capacitance and shortened service life. The sum of the peak value of the applied ripple voltage and the DC voltage shall be less than the rated working voltage.

4. 请在额定温度范围内使用电容器。如果在上限温度以上使用电容器将会导致使用寿命大大缩短或防爆阀开启，在室温下使用会保证更长的使用寿命。科学统计，使用环境温度每下降 10 摄氏度其使用寿命增加一倍。

Please use the capacitor within the rated temperature range. Using the capacitor above the upper limit temperature will significantly shorten its service life or trigger the explosion-proof valve. Use at room temperature will ensure a longer service life. Scientific statistics show that the service life doubles for every 10°C decrease in the operating environment temperature.

5. 当电容器长期贮存后，其漏电流会升高，贮存温度越高，漏电流上升愈快。因此应注意贮存环境，在电容器上施加电压后，漏电值将不断下降，如果漏电流值上升对电路有不良影响，请在使用前充电处理。

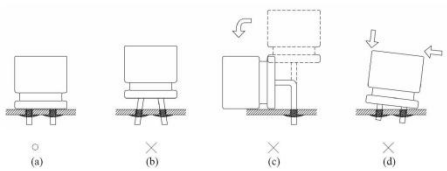
After the capacitor is stored for a long time, its leakage current will increase, and the higher the storage temperature, the faster the leakage current rises. Therefore, attention should be paid to the storage environment. When a voltage is applied to the capacitor, the leakage value will continuously decrease. If the increase in leakage current exerts adverse effects on the circuit, charging treatment should be performed before use.

6. 电容不适合用在频繁充放电的电路。容量会由于负极氧化膜的氧化而容量减小，或电容通过充放电产生的热量而损坏。

Capacitors are not suitable for circuits with frequent charging and discharging. The capacitance will decrease due to the oxidation of the negative electrode oxide film, or the capacitor may be damaged by the heat generated during charging and discharging.

7. 不良的安装或者对引线施加应力会使产品内部结构损坏，导致漏电流高或者漏液问题。

Poor installation or applying stress to the leads may damage the internal structure of the product, resulting in high leakage current or electrolyte leakage.



a). 焊接良好 Good soldering

b). PCB 孔与孔之间的间距与引线间距不同 The pitch between PCB holes

does not match the lead pitch.

c). 不要弯曲引线 Do not bend the leads.

d). 当焊接不平时，不要弯曲或扭曲电容本体 Do not bend or twist the capacitor body if the soldering is uneven.

8. 在进行浸锡或焊接时，其胶管可能因焊接时间过长、温度过高为发生破裂或者二次收缩。

During tin dipping or soldering, the hose may crack or shrink secondary due to excessive soldering time or excessively high temperature.

9. 铝电解电容器不能使用卤化有机物系列的清洗剂进行清洗。如果必须清洗，请使用能够保证电容器质量的清洗剂。对于能够保证清洗质量的清洗剂，清洗后请不要在清洗溶液或者密封容器中保管。清洗后的电容器和电路板一起在热风下干燥 10 分钟以上，热风的温度不可高于电容器的上限温度。

Aluminum electrolytic capacitors shall not be cleaned with halogenated organic compound-based cleaning agents. If cleaning is necessary, use a cleaning agent that can ensure the capacitor quality. For cleaning agents that meet the cleaning quality requirements, do not store the cleaned capacitors in the cleaning solution or sealed containers after cleaning. Dry the cleaned capacitors together with the circuit board under hot air for more than 10 minutes, and the temperature of the hot air shall not exceed the upper limit temperature of the capacitor.

10. 请不要使用含有卤化有机物系列的固定剂及涂层剂。更不要让固定剂或涂层剂将电容器封口部位全部封住。
Do not use fixatives or coating agents containing halogenated organic compounds. Furthermore, do not allow the fixative or coating agent to completely seal the capacitor's sealing area.

11. 推荐储存在 5~35℃，相对湿度小于 75%RH 无阳光直射的环境。产品出厂储存期限为 12 个月。如果储存时间超过 12 个月，请检查电气特性及可焊性。

It is recommended to store the product in an environment with a temperature of 5~35℃, relative humidity (RH) <75%, and no direct sunlight. The shelf life of the product from the date of manufacture is 12 months. If the storage period exceeds 12 months, the electrical characteristics and solderability shall be inspected.

12. 当电容器需要报废时，请联系当地的工业废弃物处理商。

When the capacitor needs to be discarded, please contact the local industrial waste disposal company.

10.符合 RoHS　RoHS Compliance

符合欧盟 RoHS 的最新标准，若客户有特殊要求，按照双方签订的相关协议为准。

Completely in accordance with the latest standard of RoHS or relevant agreements reached by both parts if customer has special requirements.