



Part No./型号: **SEL-3535RGB-2V350**

产品承认书

**SPECIFICATION FOR APPROVAL**

|                              |               |                |
|------------------------------|---------------|----------------|
| 客户名称<br>Customer             |               |                |
| 送样规格<br>Specification        |               |                |
| 送样日期<br>Deliver Date         |               |                |
| 基本参数<br>Basic parameters     |               |                |
| 特殊要求<br>Special Requirements |               |                |
| 拟制<br>Issued                 | 审核<br>Checked | 批准<br>Approved |
| 陈明华                          | 必超<br>研发中心    | 张耀华            |

客户承认盖章  
Customer Approved Signatures

客户使用条件及意见 Customer conditions and comments:



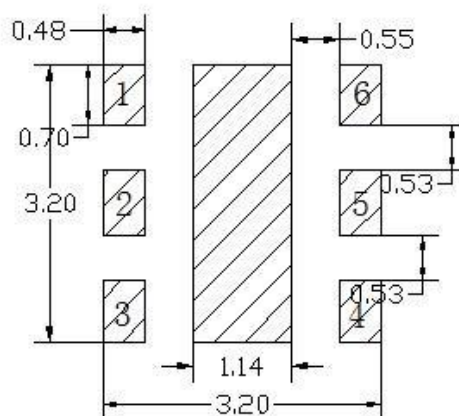
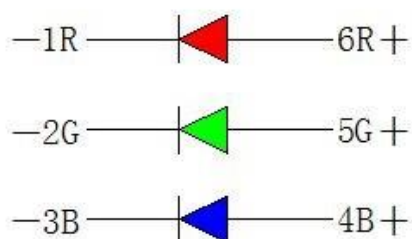
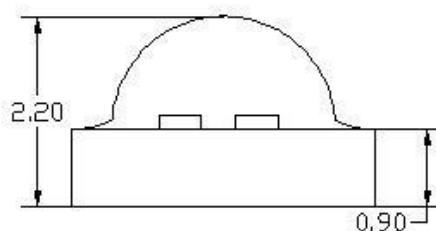
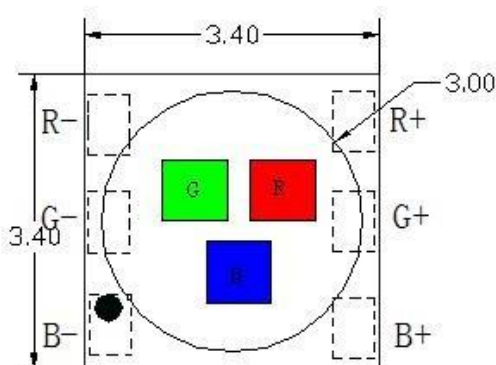
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■ **Features** 产品特征:

- low voltage operation 低电压工作
- Instant light 瞬间点亮
- Long operating life 超长工作时间

■ **Applications** 产品应用:

- spot light, ceiling light 天花灯, 球泡灯
- down light, wall lamp, garden light 投光灯, 洗墙灯, 园林灯
- Landscape lighting, lighting engineering 景观照明, 亮化工程



建议焊盘

◇ 所有尺寸标注单位都是毫米

◇ 若无标注尺寸, 公差按  $\pm 0.1\text{mm}$



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**极限参数 (Ta = 25℃)**

| Parameter                             | Symbol           | Rating    | Unit |
|---------------------------------------|------------------|-----------|------|
| DC Forward Current<br>(正向电流)          | I <sub>F</sub>   | 350       | mA   |
| Peak pulse Current*<br>(脉冲电流)         | I <sub>FP</sub>  | 700       | mA   |
| Power Dissipation<br>(功率)             | P <sub>D</sub>   | 1         | W    |
| Reverse Voltage<br>(反向电压)             | V <sub>R</sub>   | 5         | V    |
| Reverse Current<br>(反向电流)             | I <sub>R</sub>   | 10        | μA   |
| Operating Temperature Range<br>(工作温度) | T <sub>OPR</sub> | -30 ~ +75 | °C   |
| Storage Temperature Range<br>(储存温度)   | T <sub>STG</sub> | -40 ~ +85 | °C   |
| LED Junction Temperature<br>(结点温度)    | T <sub>J</sub>   | 120       | °C   |

**光电参数 (Ta = 25℃)**

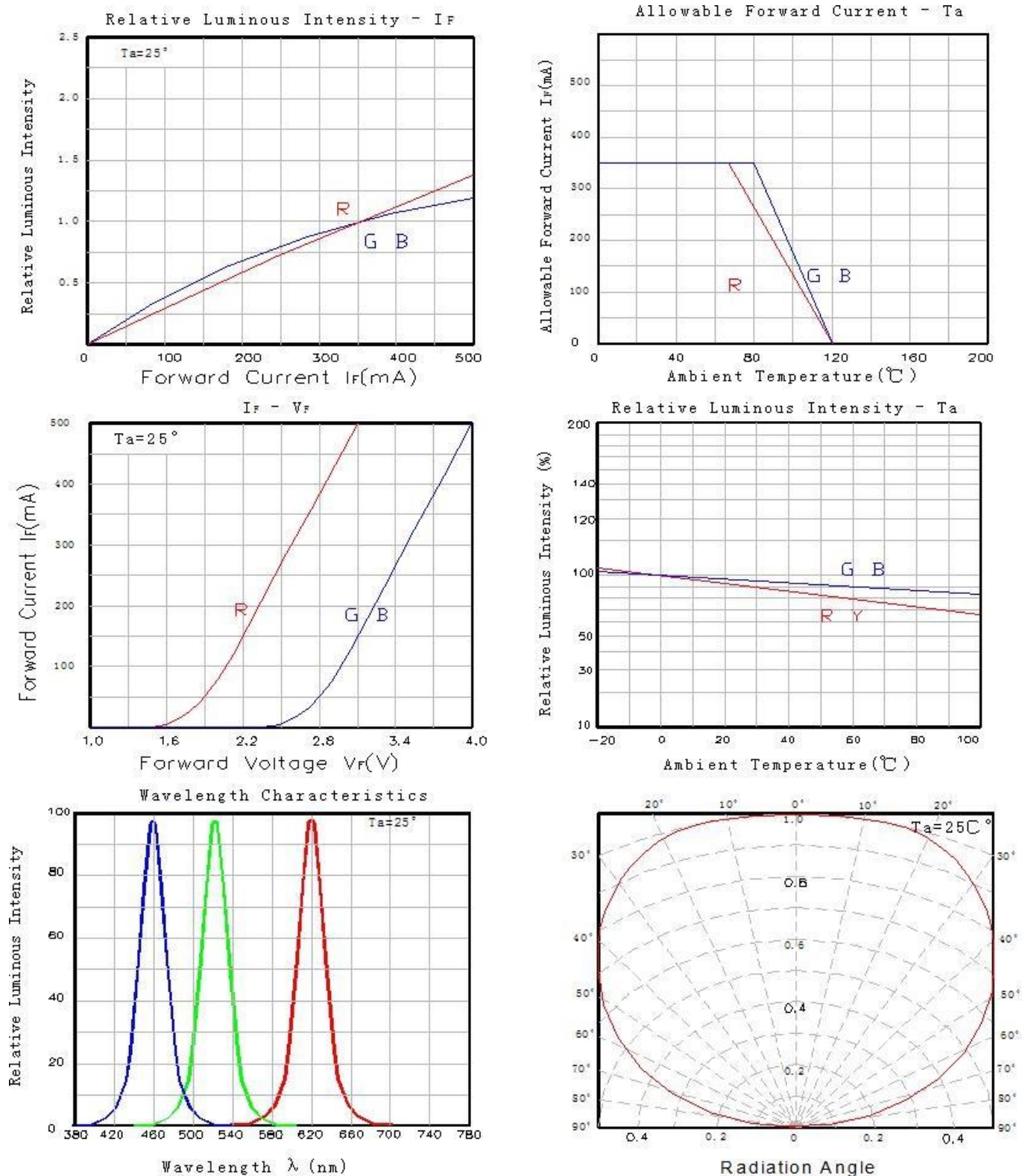
| Parameter                                                 | Symbol              | Conditions            | Emitting Color | Values |      |      | Units |
|-----------------------------------------------------------|---------------------|-----------------------|----------------|--------|------|------|-------|
|                                                           |                     |                       |                | Min    | Avg. | Max  |       |
| Forward Voltage<br>(正向压降)                                 | V <sub>F</sub>      | I <sub>F</sub> =350mA | R              | 1.80   | --   | 2.40 | V     |
|                                                           |                     |                       | G              | 2.80   | --   | 3.40 |       |
|                                                           |                     |                       | B              | 2.80   | --   | 3.40 |       |
| Luminous Flux<br>(光通量)                                    | Φ <sub>v</sub>      | I <sub>F</sub> =350mA | R              | 40     |      | 60   | lm    |
|                                                           |                     |                       | G              | 70     |      | 90   |       |
|                                                           |                     |                       | B              | 20     |      | 30   |       |
| Dominant wavelength<br>(主波长)                              | λ <sub>d</sub>      | I <sub>F</sub> =350mA | R              | 620    |      | 630  | nm    |
|                                                           |                     |                       | G              | 520    |      | 530  |       |
|                                                           |                     |                       | B              | 460    |      | 470  |       |
| Temperature Coefficient of Forward Voltage<br>(正向压降之温度系数) | ΔV <sub>F</sub> /ΔT | I <sub>F</sub> =350mA | --             | --     | -2   | --   | mV/°C |
| Reverse Current<br>(反向漏电流)                                | I <sub>R</sub>      | V <sub>R</sub> =5V    | --             | --     | --   | 10   | μA    |
| Viewing Angle <sup>[1]</sup><br>(发光角度)                    | 2Θ <sub>1/2</sub>   | I <sub>F</sub> =350mA | --             | --     | 120  | --   | Deg   |
| Thermal Resistance Junction To Board<br>(热阻)              | RΘ <sub>J-B</sub>   | I <sub>F</sub> =350mA | --             | --     | 8    | --   | °C/W  |



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典型特性曲线：

(Ta=25°C Unless Otherwise Noted)





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## 可靠性测试

| 测试项目     | 参考标准                                       | 测试条件                                                                                  | 测试时间    | Units<br>失败/成功 |
|----------|--------------------------------------------|---------------------------------------------------------------------------------------|---------|----------------|
| 循环温度测试   | JEITA ED-4701<br>100 105 或<br>MIL-STD-202G | -40℃ (30 分) ∽ 25℃ (5 分) ∽ 100℃<br>(30 分) ∽ 25℃ (5 分) 或 -40℃<br>(30min) ∽ 100℃ (30min) | 100 次   | 0/10           |
| 高温存贮     | JEITA ED-4701<br>200 201                   | T <sub>a</sub> =100℃                                                                  | 1000 小时 | 0/10           |
| 存储的温度与湿度 | JEITA ED-4701<br>100 103                   | T <sub>a</sub> =60℃ RH=90%                                                            | 1000 小时 | 0/10           |
| 低温存储     | JEITA ED-4701<br>200 202                   | T <sub>a</sub> =-40℃                                                                  | 1000 小时 | 0/10           |
| 高温使用寿命   |                                            | T <sub>C</sub> =85℃ I <sub>F</sub> =350mA                                             | 1000 小时 | 0/10           |
| 静电放电     | JEITA ED-4701<br>300 304                   | HBM 8KV 3KΩ 脉冲频率: 100<br>3 次反向脉冲                                                      |         | 0/10           |
| 循环温度 *1  | 升谱                                         | -40℃ (30 分) ∽ (90秒) ∽ 140℃ (30<br>分) ∽ (90 秒) -40℃                                    | 1000 次  | 0/10           |
| 高温高湿测试*2 | 升谱                                         | T <sub>a</sub> =100℃ RH=85% I <sub>F</sub> =最大电流                                      | 1000 小时 | 0/10           |

## 注意:

保证器件温度是室温的情况下进行测试

## 失效标准:

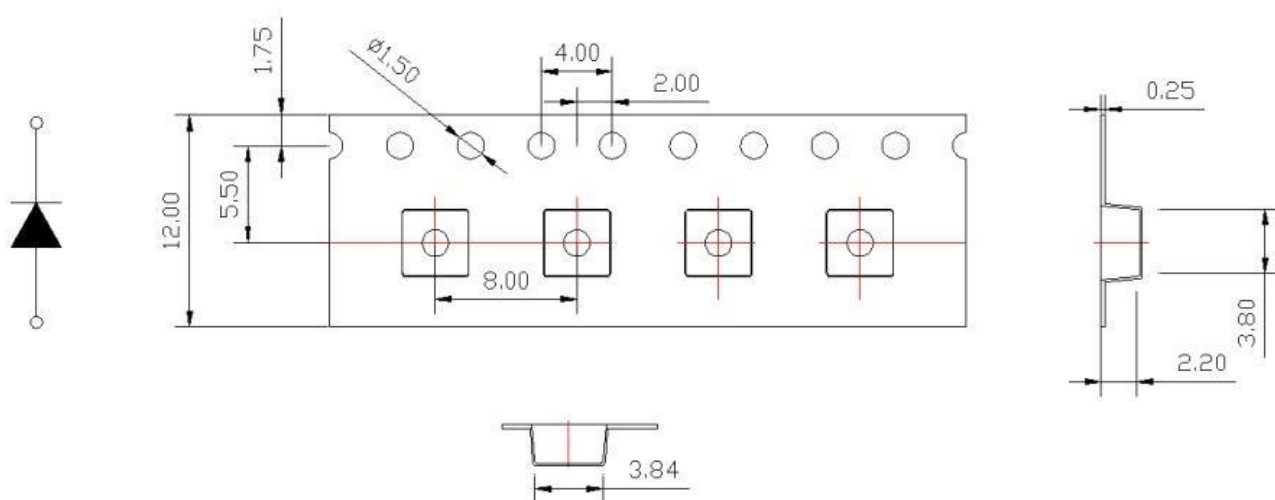
| 项目                       | 条件                    | 失效标准       |
|--------------------------|-----------------------|------------|
| 正向电压 (V <sub>F</sub> )   | I <sub>F</sub> =350mA | >起始值 x 1.1 |
| 输出辐射功率 (Φ <sub>v</sub> ) | I <sub>F</sub> =350mA | <起始值 x 0.7 |



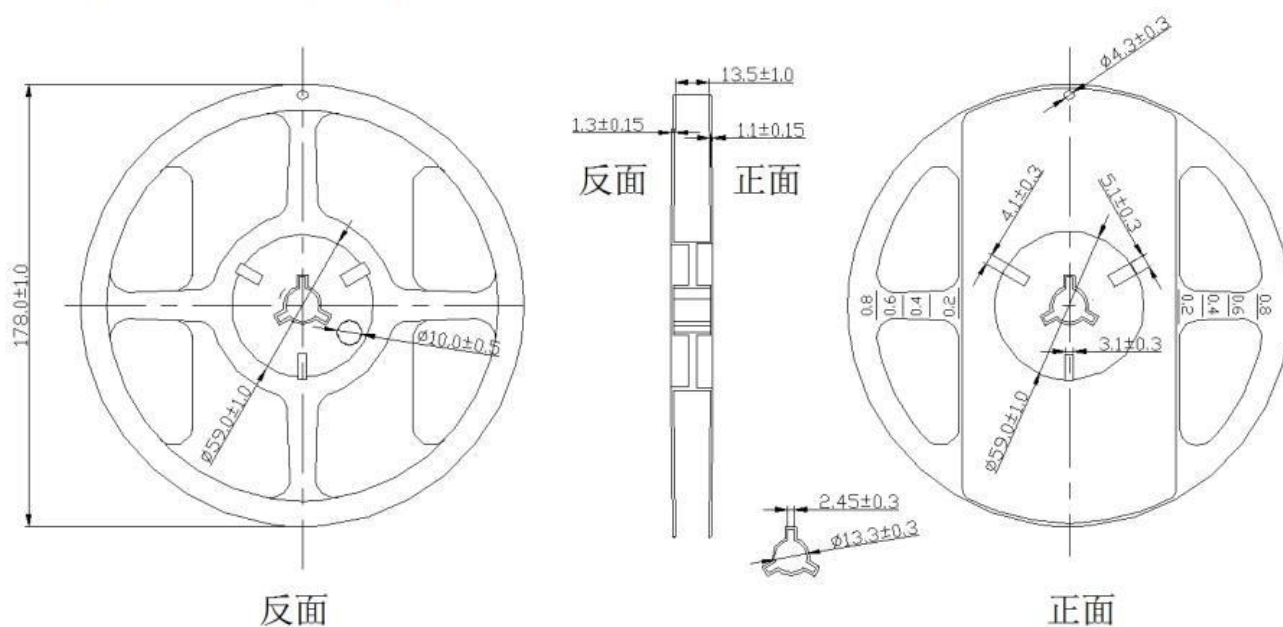
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**包装规范**

Normal packing quantity: 1000pcs/reel 正常包装数量: 1000片/卷



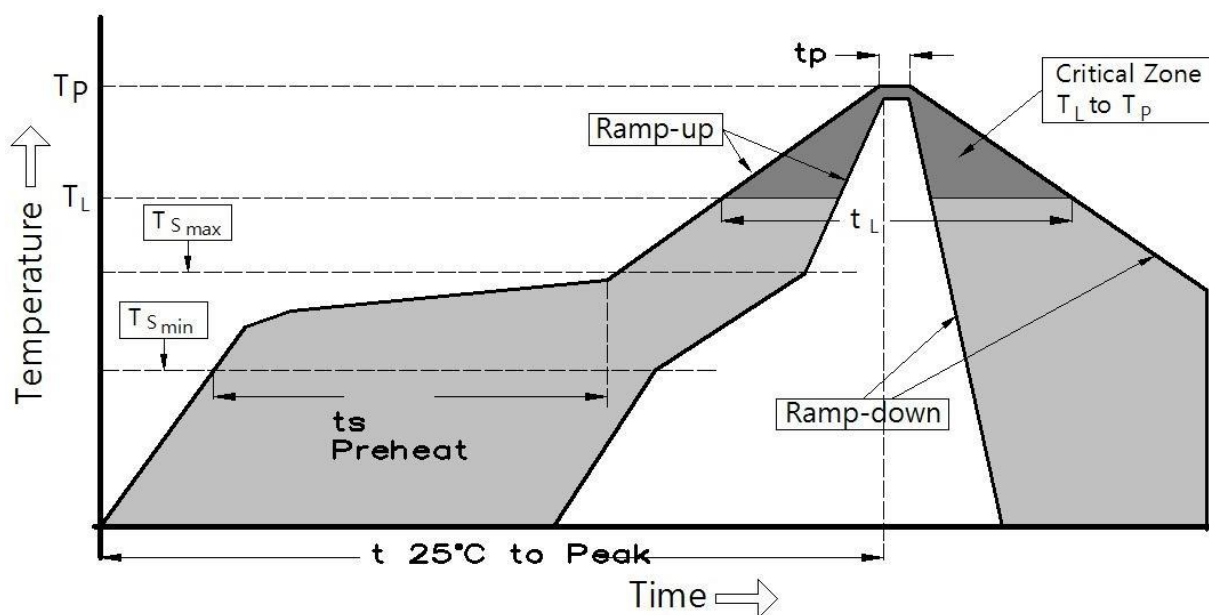
**Reel Specifications 卷盘规格**





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SMT ReflowSoldering Instructions SMT回流焊说明



|                                                  |            |
|--------------------------------------------------|------------|
| 平均升温速度 (T <sub>S max</sub> 至T <sub>p</sub> )     | 最高 3 °C/秒  |
| 预热: 最低温度 (T <sub>S min</sub> )                   | 130 °C     |
| 预热: 最高温度 (T <sub>S max</sub> )                   | 180 °C     |
| 预热: 时间 (T <sub>S min</sub> 至T <sub>S max</sub> ) | 60 - 120秒  |
| 限时维持高温: 温度 (T <sub>L</sub> )                     | 200 °C     |
| 限时维持高温: 时间 (t <sub>L</sub> )                     | 最多60 秒     |
| 峰值 / 分类温度 (T <sub>p</sub> )                      | 240 °C     |
| 限时峰值分类温度:时间 (tp)                                 | 最多10 秒     |
| 与实际峰值温度 (tp) 低 5 °C 以内的保持时间                      | 最多30 秒     |
| 降温速度                                             | 最高 6 °C/ 秒 |
| 25 °C 升至峰值温度所需时间                                 | 最多 8 分钟    |

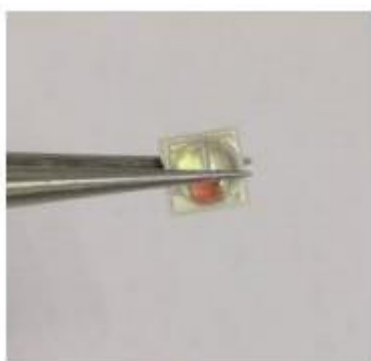


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■Product specification产品使用说明

一、Storage/use储存/使用:

1. In order to avoid moisture absorption, it is suggested to store the products in a drying cabinet with desiccant. The storage temperature is  $5^{\circ}\text{C}\sim 30^{\circ}\text{C}$ , and the humidity is  $\leq 60\%\text{HR}$  为避免吸潮建议将产品贮存在放有干燥剂的干燥柜中, 贮存温度为:  $5^{\circ}\text{C}\sim 30^{\circ}\text{C}$ , 湿度:  $\leq 60\%\text{HR}$ 。
2. After storage for six months, it is recommended to re-use the spectral separation to prevent changes in photoelectric parameters 储存六个月之后建议重新分光分色后使用, 防止光电参数发生变化。
3. It is recommended to dry products that have been sealed and stored for more than six months before use. The drying condition is  $65^{\circ}\text{C}\pm 5^{\circ}\text{C}$  for 10 hours 密封储存六个月以上的产品使用前, 建议干燥, 干燥条件为:  $65^{\circ}\text{C}\pm 5^{\circ}\text{C}$  10个小时。
4. The product shall be used within 24h after opening, otherwise it shall be baked at  $65^{\circ}\text{C}$  for 4-6h before reflow welding 产品开封24h内需使用完毕, 否则需 $65^{\circ}\text{C}$  烘烤4-6h后再过回流焊。
5. Do not press the gel surface with any sharp object (such as tweezers). Do not leave fingerprints on the surface of the colloid. The positive normal pressure of the colloid should be less than 2 newtons and the number of press should be less than 3 times. The lateral pressure of the lens body is less than 1.5 newtons and the number of press is less than 3 times. Pick up materials correctly (as shown below) 请勿以任何尖锐物体(例如镊子)按压胶体表面。请勿在胶体表面留下指印。胶体正面法向承受按压力需小于2牛顿, 按压次数小于3次; 透镜体侧面承受按压力小于1.5牛顿, 按压次数小于3次。正确拾取材料(如下图):



NG



OK

二、Products should not be in contact with water, oil or organic solutions. 产品不得接触水、油、有机溶液。

三、The operating current value of the product should consider LED junction temperature 产品使用工作电流大小值应考虑LED结温。

四、Repackage unused products in moisture-proof bags and store in a dry place 重新包装未使用的产品置防潮袋密封好之后贮存在干燥的地方。

五、External dimensions are subject to change without prior notice 产品外观尺寸可更改而不另行通知。



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六、Anti-static requirements: when using products, must wear anti-static ring or anti-static gloves, all equipment, devices, machines must be effectively grounded. This product belongs to electrostatic sensitive device, pay attention to anti-static protection!防静电要求：使用产品时，必须戴防静电环或防静电手套，所有设备、装置、机台必须有效接地。该产品属于静电敏感器件，注意做好防静电保护！

七、When LED working, push the temperature of PCB board should not exceed 60℃.当LED工作时，推荐 PCB 板的温度不要超过 60℃。

八、Anti - vulcanization, chlorination, bromination and other treatments防硫化、氯化、溴化等处理：

In the closed, high temperature environment, the lamp may contain sulfur/chlorine/bromine and other substances, these sulfur, chlorine and bromine elements will volatilize into gas and corrosion LED light source. Because the LED seal silica gel has porous structure, and the light source silver plating reaction occurred. After curing reaction of LED light source, the functional area of the product will darken, the luminous flux will gradually decline until it becomes slightly bright, and the color temperature will drift obviously, and the LED light source will eventually fail. It is recommended to conduct sulfur emission test of lamps first to ensure that LED light source works in sulfur-free/chlorine/bromine and other material environment.在密闭、高温的环境中，灯具内可能含硫/氯/溴等物质，这些硫、氯和溴元素会挥发成气体并腐蚀 LED 光源。因为 LED 封密硅胶具有多孔性结构，与光源镀银层发生硫化反应。LED 光源出现硫化反应后，产品功能区会黑化，光通量会逐渐下降直至微亮，色温出现明显漂移，LED 光源最终会失效。建议先进行灯具排硫测试，确保 LED 光源在无硫/氯/溴等物质环境进行工作。

九、When the customer applies LED, it shall refer to the parameters of this specification and the requirements of operating environment. If the LED is used beyond the parameters or standard conditions without verification, our company will not make any quality guarantee。客户在应用 LED 时，需参考此规格书参数及使用环境要求，未经验证情况下超出参数或标准条件使用，我司不作任何品质担保。

十、Other points for attention, please refer to our LED user manual.其它注意事项请参照我们的 LED 使用手册。

**■Declare 申明**

This specification is written both in English and in Chinese and the latter is formal.  
此规格书以中英文方式书写，若有冲突以中文版本为准。