

产品规格书

SPECIFICATION

产品名称 name.NO: 1206 橙光

产品型号 Model.NO: 15-21UYOC/TR8

文件编号 Document.NO:

版 次 REV.NO: V1.0

描述 Description:

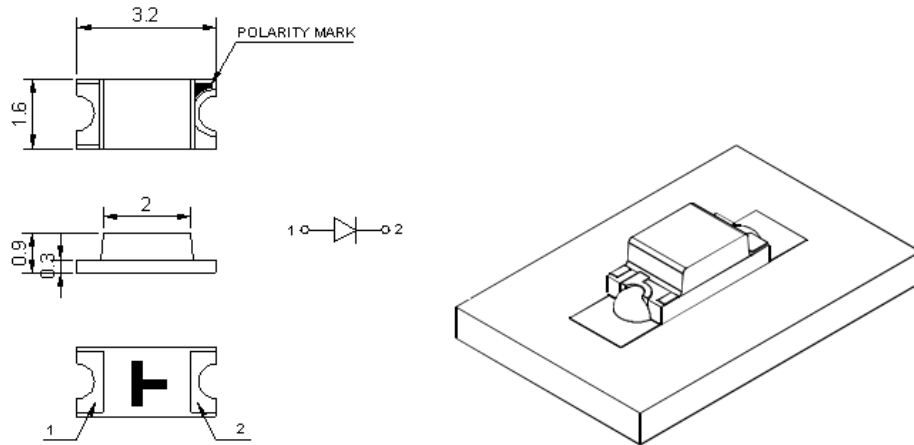
- 3.2×1.6mm 贴片发光二极管 3.2×1.6mm Chip SMD
- 胶体颜色 Colloid Color: 无色透明 Water Transparent
- 发光颜色 Emission Color: 橙色 Orange
- 半功率角度 Viewing Angle :120°

| | | | |
|--|------------------|-------------------|---------------------|
| 深圳市科特翎科技有限公司 SHENZHEN KETERINE TECHNOLOGY Co.,Ltd | | | |
| 编制 Prepared by | 审核 Checked by | 核准 Approved by | 市场部 Market Dept. |
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|-------------------------------|------------------|-------------------|--------------------|
| 客户确认 CUSTOMER CONFIRMATION | | | |
| 确认 Confirmed by | 审核 Checked by | 核准 Approved by | 确认 Confirmed by |
| | | | |

1. 外形尺寸 **Dimensions**

单位(Units):毫米(mm)



注意:

所有尺寸单位为 mm ， 如无特殊说明误差范围为 ± 0.1 mm

All dimensions area in mm tolerance is ± 0.1 mm unless otherwise noted.

2. 光电特性 Electrical / Optical characteristics

(1) 最大限度值 Absolute Maximum Ratings (TA=25±5°C)

| 项目Item | 符号 Symbol | 最大额定值 Absolute Maximum Rating | 单位 Unit |
|-----------------------------|--------------|---|-------------------------|
| 正向电流Forward Current | IF | 30 | mA |
| 正向峰值电流Pulse Forward Current | IFP | 150 | mA |
| 反向电压Reverse Voltage | VR | 9 | V |
| 功率消耗Power Dissipation | PD | 100 | mW |
| 工作温度Operating Temperature | Topr | -40°C To +85°C | °C |
| 贮藏温度Storage Temperature | Tstg | -40°C To +85°C | °C |
| 焊接温度Soldering Temperature | Tsld | ReflowSoldering:260°C Hand Soldering : 350°C | for 10sec. for 3sec. |

1/10 周期, 0.1 msec 脉宽

IFP Conditions : 1/10 Duty Cycle, 0.1 msec Pulse Width.

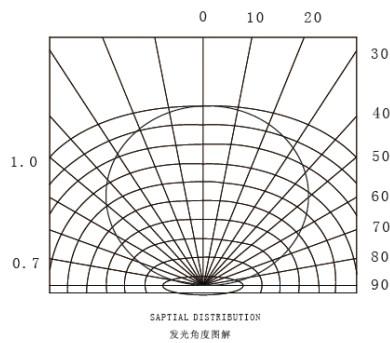
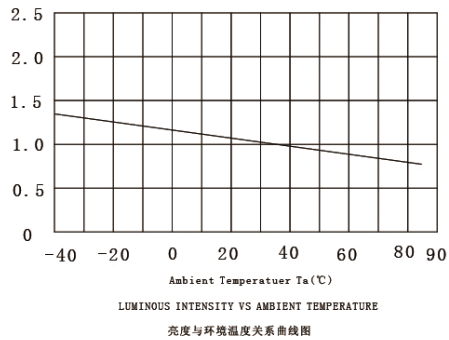
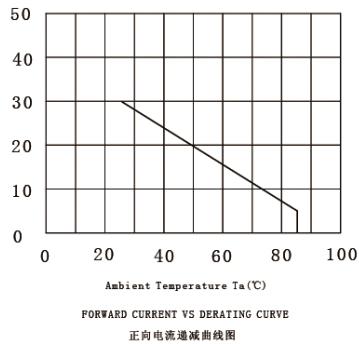
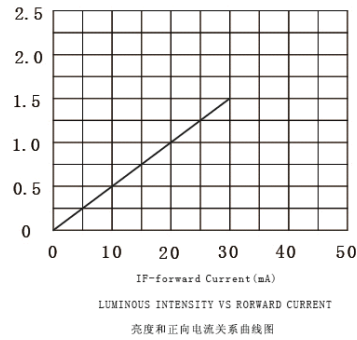
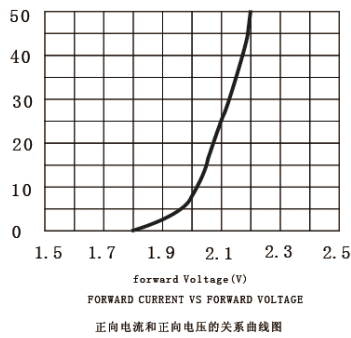
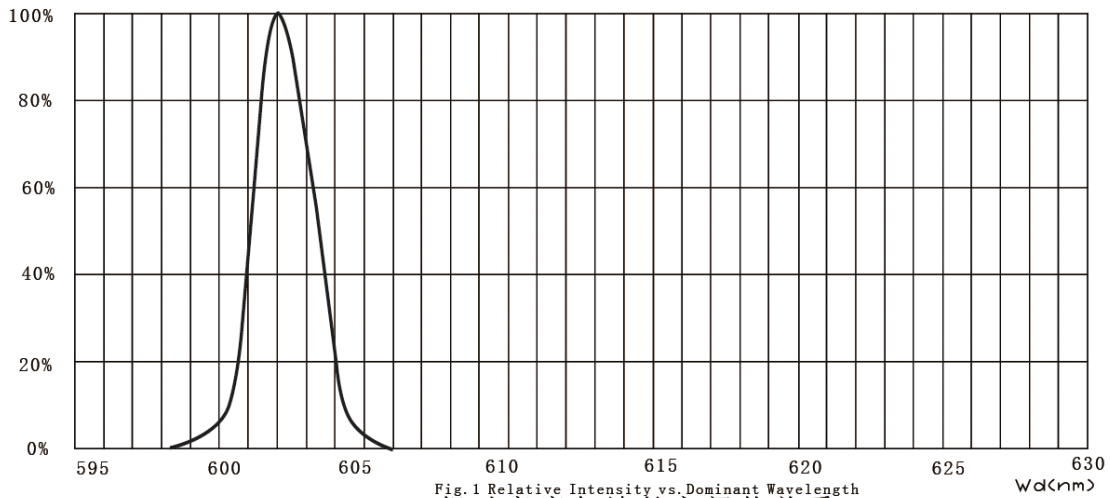
(2) 样品光电参数 Initial Electrical/Optical Characteristics (TA=25±5°C)

| 符号 Symbol | 项目 Item | 单位 Units | 最小值 Min. | 规格值 Typ. | 最大值 Max. | 测试条件 Test Conditions |
|--------------|----------------------------|-------------|-------------|-------------|-------------|----------------------------|
| VF | 正向电压 Forward Voltage | V | 1.8 | | 2.2 | IF=20mA |
| IR | 反向电流 Reverse Current | uA | | | 10 | VR=9V |
| 2θ ½ | 发光角度 Viewing Angle | ° | | 120° | | IF=20mA |
| ∅IV | 发光强度 Luminous Intensity | Mcd | 90 | | 120 | IF=20mA |
| λ D | 主波长 Dominate Wavelength | Nm | 601 | | 604 | IF=20mA |

正向电压允许误差± 0.05V Tolerance of measurement of Vf is ±0.05 V.

亮度允许误差± 10% Luminous Intensity Measurement allowance is ± 10%.

3. 特性曲线 Characteristic curve



4. 可靠性 RELIABILITY

(1)测试项目及结果 Test Items and Results

| 序号 | 试验项目 | 参考标准 | 试验条件 | 持续时间 | 取样数 | 接收水准（不合格数量/抽样总数） |
|----|----------|-----------------------------|--|-------------|-----|------------------|
| 1 | 温度循环 | JEITA ED-4701 100 105 | -40℃ ~ 25℃ ~ 100℃ ~ 25℃ 30分钟 5分钟 30分钟 5分钟 | 循环 100 回合 | 50 | 0/50 |
| 2 | 冷热冲击 | MIL-STD-202 G | -40℃ ~ 100℃ 15分钟 15分钟 | 循环 500 回合 | 50 | 0/50 |
| 3 | 高温储存 | JEITA ED-4701 200 201 | Ta=100℃ | 1000 小时 | 50 | 0/50 |
| 4 | 低温储存 | JEITA ED-4701 200 202 | Ta=-40℃ | 1000 小时 | 50 | 0/50 |
| 5 | 常温寿命试验 | | Ta=25±5℃ IF=20mA | 1000 小时 | 50 | 0/50 |
| 6 | 高温高湿寿命试验 | | Ta=60℃ RH=85% IF=20mA | 1000 小时 | 50 | 0/50 |
| 7 | 可焊性（回流焊） | JEITA ED-4701 300 303 | Tsol=235℃ ± 5℃, 5秒 使用助焊剂 | 焊接一次，5秒 | 10 | 0/10 |
| 8 | 耐焊性（回流焊） | JEITA ED-4701 300 301 | Tsol=260℃, 10秒 预处理: 35℃ 95%RH 96小时 | 焊接二次，每次 10秒 | 10 | 0/10 |

5. 注意事项 Cautions

(1) 焊接条件 Soldering Conditions

本产品最多只可回焊两次,且在首次回焊后须冷却至室温之后方可进行第二次回焊.

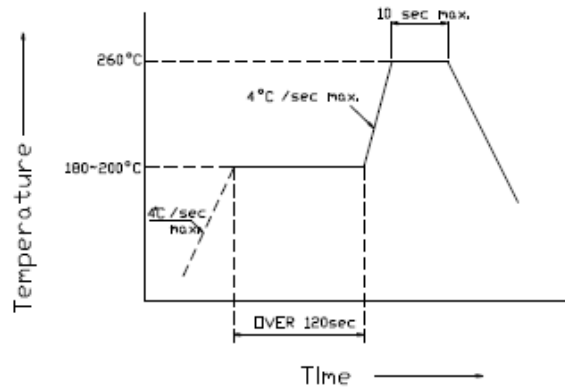
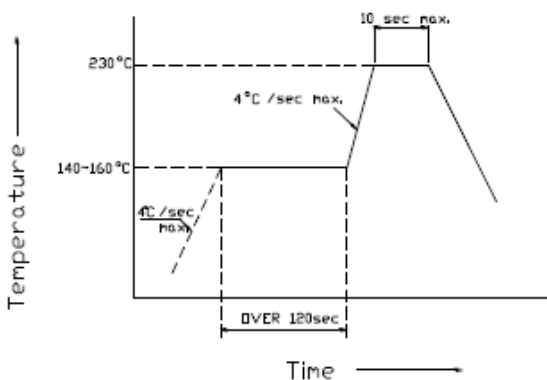
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and Second soldering process.

推荐焊接条件(Recommended soldering conditions)

| 回流焊接 Reflow Soldering | | 手工焊接 Hand Soldering | |
|-----------------------|----------------|---------------------|--------------------------------|
| | 有铅 Lead Solder | 无铅 Lead-free Solder | 温度 Temperature |
| 预热温度 Pre-heat | 140 ~ 160°C | 180 ~ 200°C | 350°C Max. |
| 预热时间 Pre-heat time | 120 sec. Max. | 120 sec. Max. | 焊接时间 Soldering time |
| 峰值温度 Peak temperature | 230°C Max. | 260°C Max. | 3 sec. Max. (one time only) |
| 焊接时间 Soldering time | 10 sec. Max. | 10 sec. Max. | |
| 条件 Condition | 参考下图 | 参考下图 | |

有铅回焊 (Lead Solder)

无铅回焊 (Lead-Free Solder)



(2) 静电 Static Electricity

触摸 LED 时,推荐使用防静电手腕带或防静电手套.

It is recommended that a wrist band or an anti-electrostatic glove be used when handling the LEDs.

所有装置、设备、机器均应接地.

All devices, equipment and machinery must be properly grounded.

静电损坏的 LED 会显示出异常特征:正向电压变低或在低电流时死灯.标准: IF=0.5mA 时, VF > 2.0V

Damaged LEDs will show some unusual characteristics such as the forward voltage becomes lower, or the LEDs do not light at the low current. Criteria : (VF > 2.0V at IF=0.5mA)

(3) 防潮包装 Moisture Proof Package

使用防潮包装

It is recommended that moisture proof package be used

(4) 储藏 Storage

打开包装袋之前,LED 在温度为 30°C 或更低湿度 70%RH 以下,可保存一年.

Before opening the package, The LEDs should be kept at 30°C or less and 70%RH or less. The LEDs should be used within a year.

(1) 打开包装之后,应在 24hrs 内焊接完毕.

After opening the package, The LEDs should be soldered within 24 hours (1days) after opening the package.

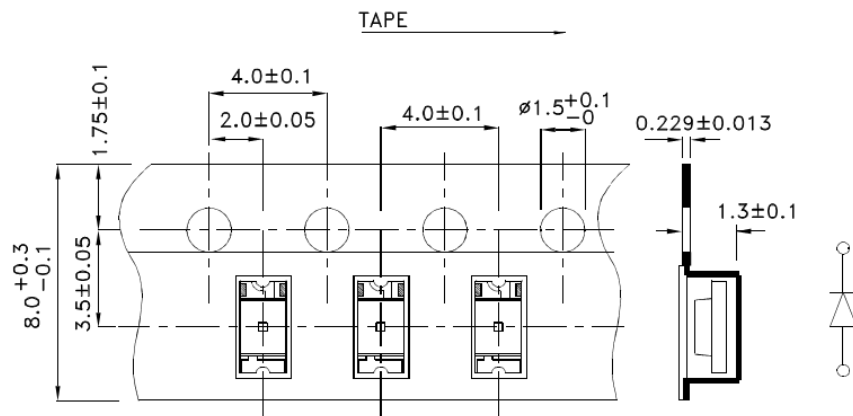
(2) 抽真空包装的产品储存超过 1-3 个月, 重新使用时需烘烤 85°C/6H.

he product with vacuum packaging stored over 1-3 months, to be re-used baking 85 °C / 6H.

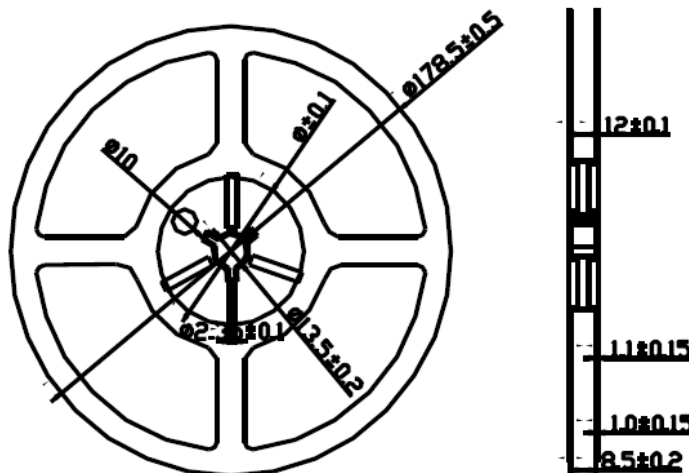
1. 包装 PACKAGING

(1) LEDS 在装带之后纸箱包装. The LEDs are packed in cardboard boxes after taping.

(2) 装带规格 Taping Specifications (单位:毫米 Units:mm)



(3) 卷轴尺寸 Reel Dimension



每卷数量 3000 个/卷 PACKAGE: 3000Pcs/Reel

(4) 最小包装标签注明以下:产品名称.批号.参数范围.数量.

The label on the minimum packing unit shows ; Part Number, Lot Number, Ranking, Quantity.

(5) 请注意防水防潮

Keep away from water, moisture in order to protect the LEDs.

(6) 须采取适当防护措施,以防包装箱跌落或受到强力撞击造成对产品的损伤.

The LEDS may be damaged if the boxes are dropped or receive a strong impact against them. so precautions must be taken to prevent any damage.