

# 承认书

## SPECIFICATION FOR APPROVAL

客户名称：

Customer

客户型号：

Customer Part No.

工厂型号：

5050UV395-01

Manufacturer Part No.

产品规格：

Specification

制订人：

Issued By

日期：Date

审核：

Approved By

日期：

客户回签：

Customer Confirmation

日期：

确认结果 (Confirm result)：

合格 Approve (请于认可栏中签名 Please sign in the confirmation column.)

不合格 Reject (请填写原因 Please write down the reason for rejecting.)

原因 Reason: \_\_\_\_\_

版本 Version: \_\_\_\_\_

## Technical Data Sheet

Part Number: UV -5050F-□ 0.2W TOP LED, Working Current @IF=60mA

### Features

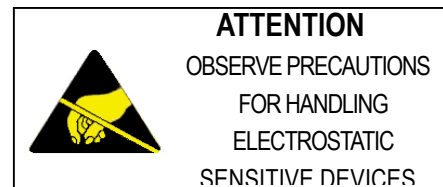
- Package Size: 5.0 (L) × 5.0(W) × 1.5 (T) mm
- Silicone Packed
- Suitable for different working environment
- Super long lifetime: 50000HRs
- Wide viewing angle ( $2\theta_{1/2}=120^\circ$ )

### 产品特征

- 封装尺寸: 5.0 (长) × 5.0 (宽) × 1.5 (厚) mm
- 采用硅胶封装
- 适应多种工作环境
- 超长寿命: 50000 小时
- 宽角度 ( $2\theta_{1/2}=120^\circ$ )

### Device Selection Guide 物料选用指南

ITEM 项目	MATERIALS 物料
Resin 胶体	Silicone 硅胶
Bonding wire 焊线	Φ0.8mil Au
Lens color 胶体颜色	Water Clear 水清透明
Dice 晶片	InGaN



- Most suitable for displayers
- Landscape lighting products
- Decorative lighting: light strip

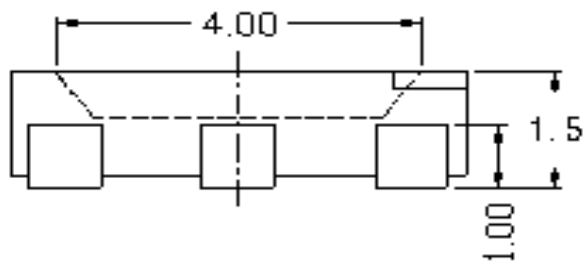
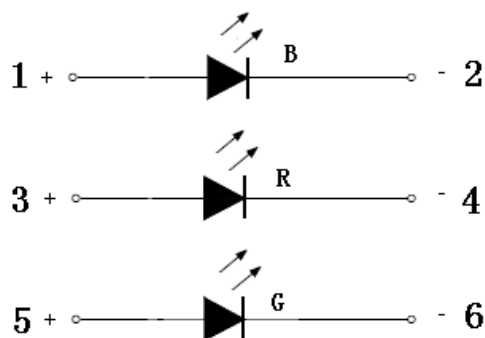
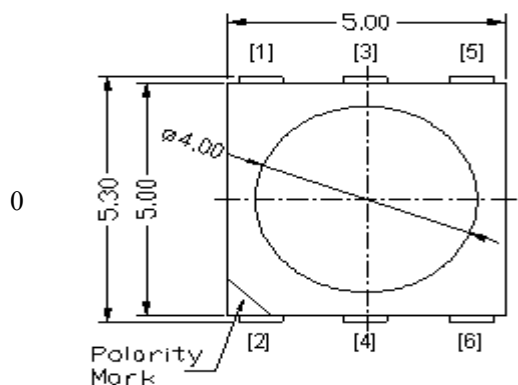
### 产品应用

- 最适合用于显示屏
- 景观照明产品
- 装饰照明: 柔性灯条

## Technical Data Sheet

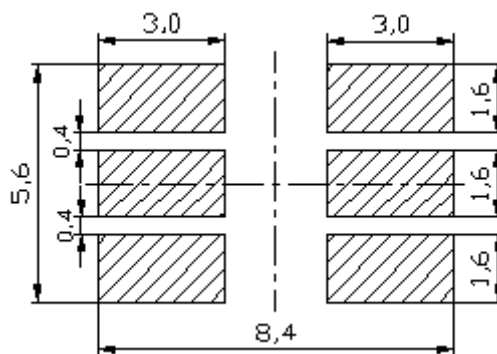
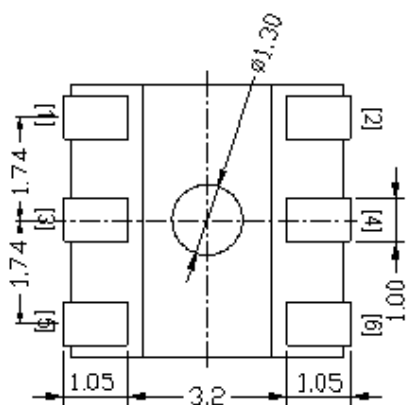
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### Package Outline Dimensions 封装外形尺寸



### Recommended solder pad for TA3-5050 series

建议用于 TA3-5050 系列的焊盘



**Note:** The tolerances unless mentioned is  $\pm 0.01$  mm. 除非另有说明，以上尺寸的公差为  $\pm 0.01$  mm。

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### Absolute Maximum Ratings 单颗极限参数(Ta=25°C)

Parameter 参数	Symbol 符号	Rating 额定值	Unit 单位
Reverse Voltage 反向电压	V <sub>R</sub>	5	V
Forward Current 正向电流	I <sub>F</sub>	20*3	mA
Operating Temperature 工作温度	Topr	-20 ~ +80	°C
Storage Temperature 储存温度	Tstg	-20 ~ +80	°C
Soldering Temperature 焊接温度	Tsol	265(for 30seconds)	°C
Power Dissipation 功耗	Pd	110	mW
Peak Forward Current 峰值正向电流 (Duty 1/10 @ 1KHz)	I <sub>FP</sub>	100	mA

### Electro-Optical Characteristics 单颗光电特性 (Ta=25°C)

Parameter 参数	Symbol	Min.	Typ.	Max.	Unit	Condition 条件
Viewing Angle 角度	2 θ 1/2	-----	120	-----	deg	If=20mA
Reverse Current 反向电流	I <sub>R</sub>	-----	-----	10	μ A	VR=5V
Dominant Wavelength(主波长)	λ d	390	395	400	nm	If=20mA
Forward Voltage(V) 正向电压	V <sub>f</sub>	3.0		3.6	V	If=20mA
Luminous Intensity(mcd) 发光强度	I <sub>V</sub>	400	-----	600	mcd	If=20mA

### Notes:

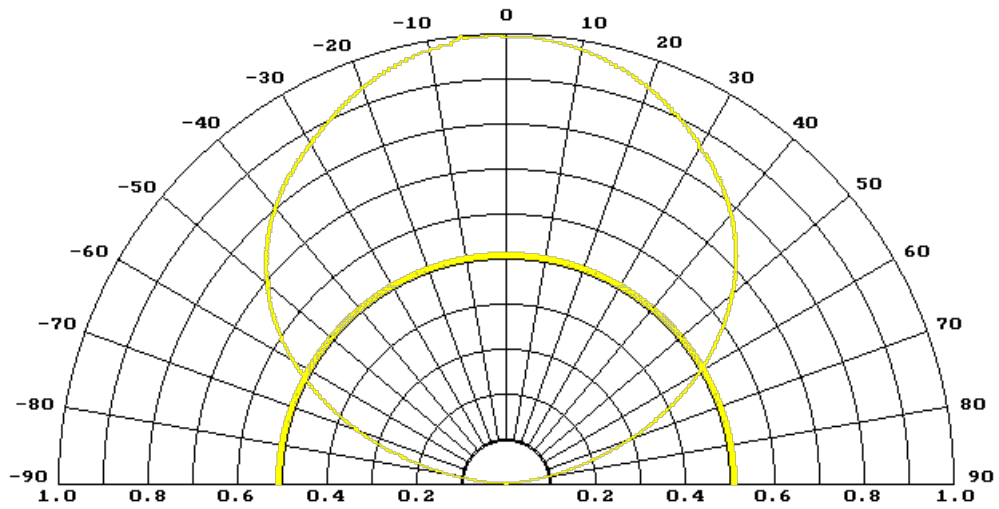
1. Tolerance of Luminous Intensity is ±15%. 发光强度的公差为±15%。

Tolerance of Forward Voltage is ±0.1V. 正向电压的公差为±0.1V

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### Directive Characteristics 配光曲线特性

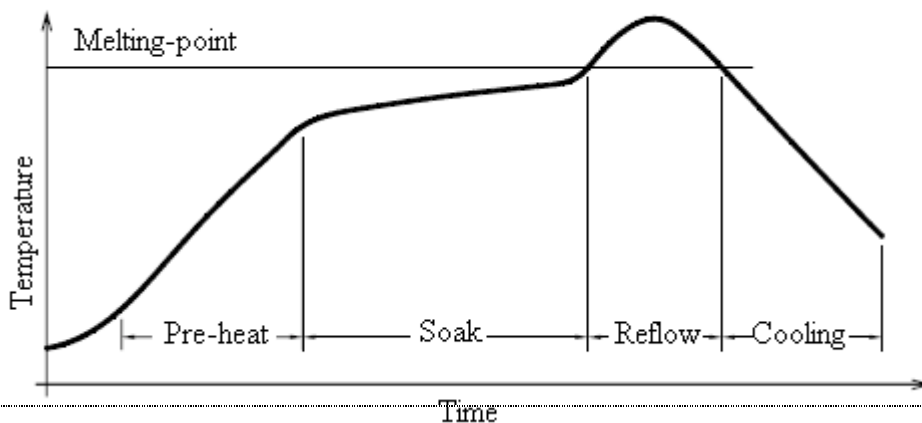


### ● Reflow Temp/Time 回流焊温度曲线

Handing of an SMD LED Should be done only when the Package has been cooled down to below 40°C or less. This is to Prevent SMD LED failures due to thermal-mechanical stress during handing.

### ● Reflow soldering

Temperature (top surface of the SMD LED )profile:



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### **1. Use with all SMDs Solder=Sn63-Pb37**

Average ramp-up rate = 4°C/sec.max.

Preheat temperature: 100° ~ 150°C

Preheat time = 120sec.max.

Ramp-down rate = 6°C/sec.max.

Peak temperature = 230°C max

Time within 5°C of actual peak temperature = 10 sec.max.

Duration above 183°C is 60 sec.max.

### **2. Solder = Lead-Free**

Average ramp-up rate = 4°C/sec.max

Preheat temperature: 150~200°C

Preheat time = 120 sec.max.

Ramp-down rate = 6°C/sec.max.

Peak temperature = 250°C max.

Time within 5°C of actual peak temperature = 10 sec.max.

Duration above 217°C is 60 sec.max.

### ● Test circuit 测试电路



### ● Handling precautions 处理注意事项

#### 1. Over-current-proof 过电流保护

Customer must apply resistors for protection; otherwise slight voltage shift will cause big current change (Burn out will happen).

客户必须采用电阻进行保护，否则轻微电压漂移将导致电流发生巨大变化(产品将被烧坏)。

#### 2. 清洗

2.1 When necessary, cleaning should occur only with **isopropyl alcohol (IPA)** at room temperature (25°C) for a duration of no more than one minute. Dry at room temperature for 15 minutes before use.

产品如需清洗，只能在室温(25°C)下采用**异丙醇(IPA)**清洗，清洗时间不超过1秒。使用前在室温下放置15分钟晾干产品。

2.2 The influence of ultrasonic cleaning on the SMD LED depends on factors such as ultrasonic power and the way the SMD LEDs are mounted. Ultrasonic cleaning should be pre-qualified to ensure this will not cause damage to the SMD LEDs.

超声波清洗对SMD LED的影响取决于超声波功率及SMD LED的贴装方式等因素。超声波清洗需经过预审合格，以确保此举不会对SMD LED造成损害。

#### 3. Storage 储存

3.1 It is recommended to store the products in the following conditions 推荐在下列环境下储存：

Humidity: 60% R.H. Max. 湿度：相对湿度 $\leq$ 60%

Temperature: 5°C~30°C(41°F~86°F) 温度：5°C~30°C(41°F~86°F)

3.2 Shelf life in sealed bag: 12 month at  $<5^{\circ}\text{C}\sim 30^{\circ}\text{C}$  and  $<30\%$  R.H. after the package is opened, the products should be used within 24hrs or they should be kept stored at  $\leq 20\%$  R.H. with zip-lock sealed.

以密封袋储存保质期：12个月， $-5^{\circ}\text{C}\sim 30^{\circ}\text{C}$ ，相对湿度 $<30\%$ 。产品开封后应在24小时内使用，或在相对湿度 $\leq 20\%$ 环境下储存，并以拉连锁密封。

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### 4. Baking 烘烤

It is recommended to bake before soldering when the pack is unsealed after 24hrs. The conditions are as followings:

如包装敞开超过 24 小时，我们建议焊线前对产品进行烘烤。烘烤条件如下：

**4.1** 80±3℃(15-25hrs) and <5%RH, taped reel type 卷带

**4.2** 100±3℃ (1hr~2hrs), bulk type 散装

**4.3** 130±3℃ (45min ~1hr), bulk type 散装