

SPECIFICATION

产品规格书

NO. (编号): YCS-SE-401-PE-0020

Customer(客户):

Part No.(型号): YCS-2835U15F-370nm

Description(描述): 2835 UV LED

Model(说明): 2835 紫外 LED

CUSTOMER APPROVED (客户审核)	APPROVED (核准)	ISSUED (制定)
	卢淑芬	赵文

地址：广东省深圳市宝安区鹤洲阳光工业园

Add: Sunshine Industrial Park, Hezhou, Xixiang, Bao'an District Shenzhen City, Guangdong Province, China.

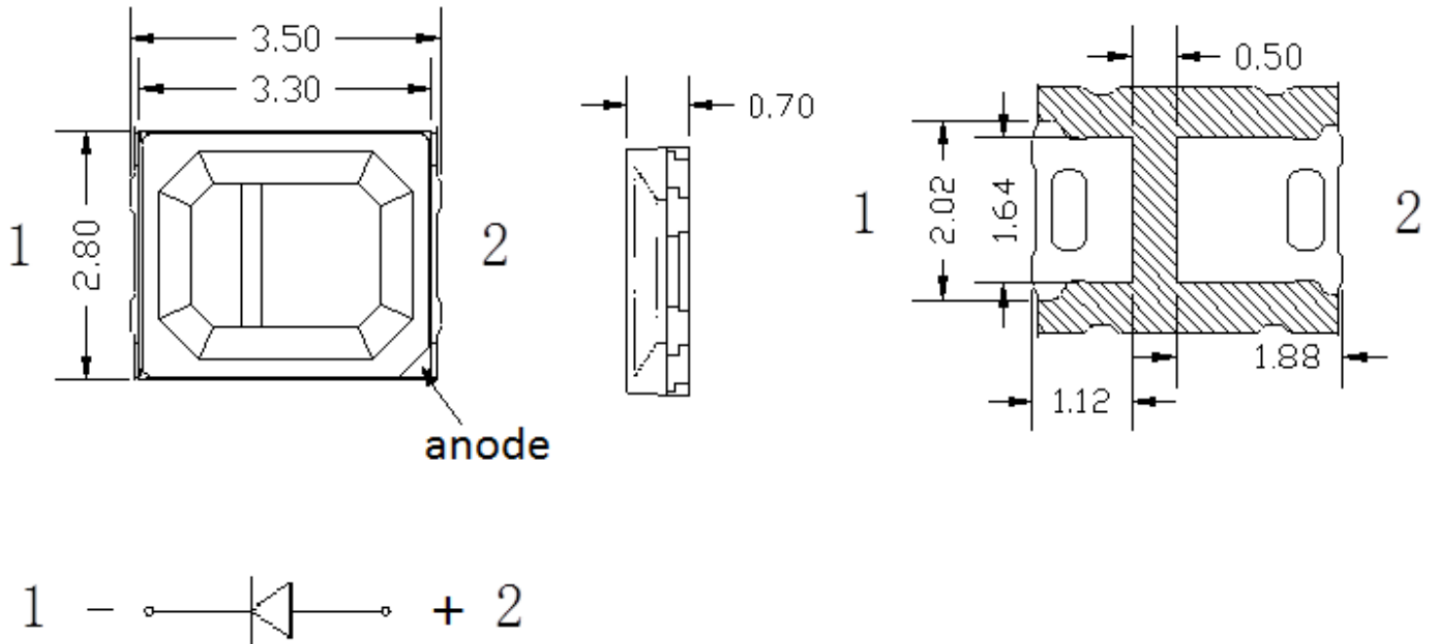
◆ Features 特性:

- * Small package and Instant light 体积小，发光响应快
- * Suitable for all SMT assembly and solder process 使用所有 SMT 焊接工艺
- * High reliability 高可靠性
- * Lead free product 不含铅，环保
- * RoHS compliant 通过 RoHS 认证

◆ Applications 产品应用:

- * Nail dryer
- * UV curing
- * Security detection
- * Moth-killing lamp
- * Medical treatment and health
- * General use
- * 美甲机
- * 紫外固化
- * 防伪检测
- * 诱蚊灯
- * 医疗健康
- * 一般应用

◆ Package Dimensions 产品外观尺寸



Notes:

1. All dimensions are in mm 所有尺寸单位为毫米。
2. Tolerance is $\pm 0.2\text{mm}$ unless otherwise noted. 非特殊标注，公差为 ± 0.2 毫米。

◆ Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$) 绝对最大额定值

Parameter (参数)	Symbol (符号)	Rating (等级)	Unit (单位)
Power Dissipation 额定功率	P_D	0.2	W
Forward Current 正向电流	I_F	60	mA
Peak Forward Current 脉冲电流	I_{FP}	100	mA
Operation Temperature Range 工作温度范围	T_{opr}	-35 to +60	$^{\circ}\text{C}$
Storage Temperature Range 储存温度范围	T_{stg}	-40 to +70	$^{\circ}\text{C}$
ESD Sensitivity (HBM) 抗静电能力(人体模式)	--	500	V
Soldering Temperature 手动焊接温度	300 $\pm$ 20 $^{\circ}\text{C}$ /3~5sec		

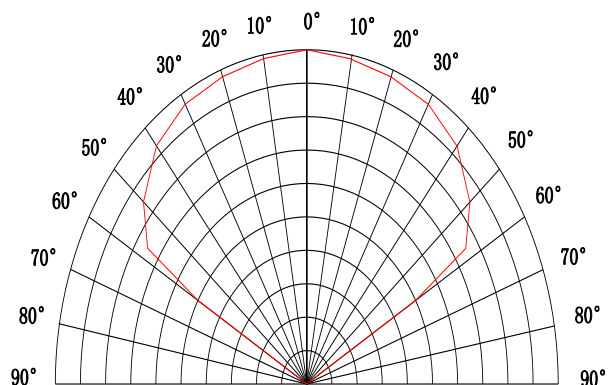
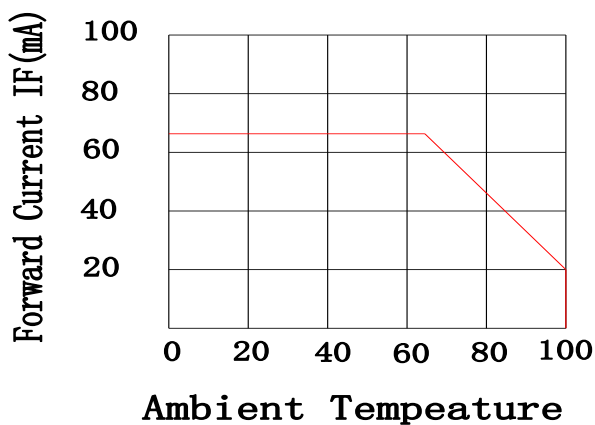
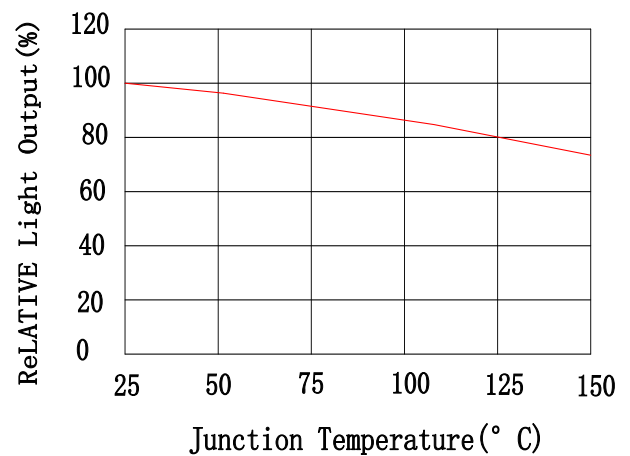
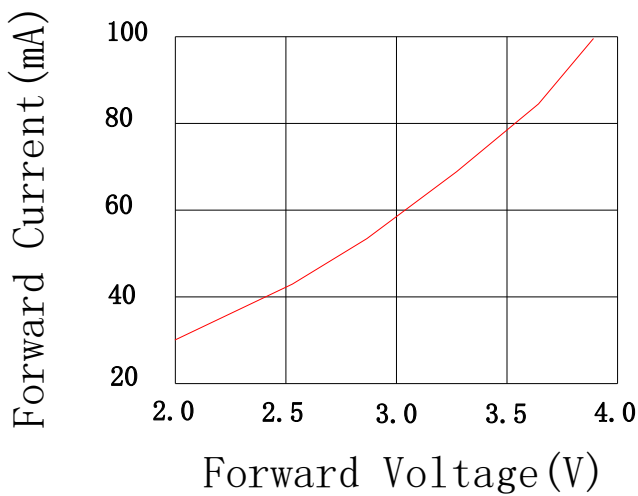
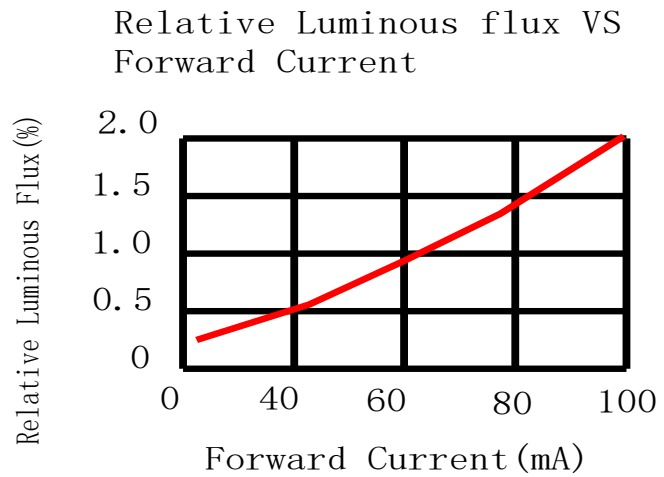
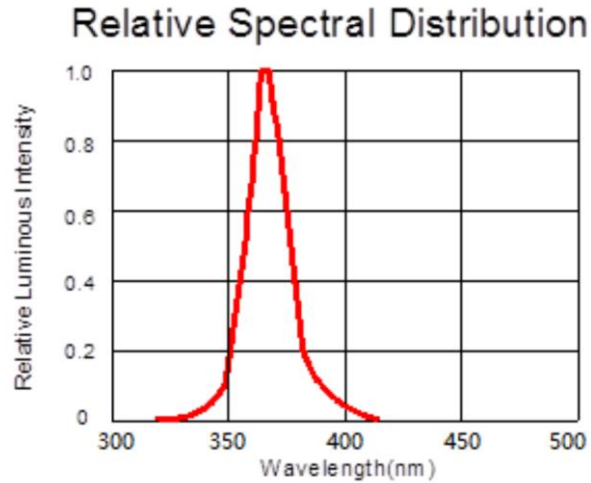
NOTE: * Pulse width(脉冲宽度) $\leq 0.1\text{msec}$ Duty Ratio(周期) $\leq 1/10$ ◆ Electrical-Optical Characteristics ($T_A=25^{\circ}\text{C}$) 电性与光学特性

Parameter 参数	Test Condition 测试条件	Symbol 符号	Min 最小值	Typ 典型值	Max 最大值	Unit 单位
Forward Voltage 正向电压	$I_F=60\text{mA}$	VF	3	3.4	3.8	V
Reverse Current 反向电流	$V_R=-5\text{V}$	IR	---	---	5	μA
View Angle 发光角度	$I_F=60\text{mA}$	2 θ 1/2	---	120	---	deg.
Peak Wavelength 峰值波长	$I_F=60\text{mA}$	λ_p	365	---	375	nm
Radiation flux 辐射通量	$I_F=60\text{mA}$	Φ_e	25	---	80	mW

Note: the test tolerance 测试公差**VF** : $\pm 0.05\text{V}$ **λ_p** : $\pm 5\%$ **Φ_e** : $\pm 10\%$

◆ Typical Electrical/Optical Characteristic Curves($I_f=60\text{mA}$; $T_A=25^\circ\text{C}$)

典型光电特性曲线



◆ Reliability 信赖性测试项目及测试条件

1. Test Items And Results 测试项目及结果

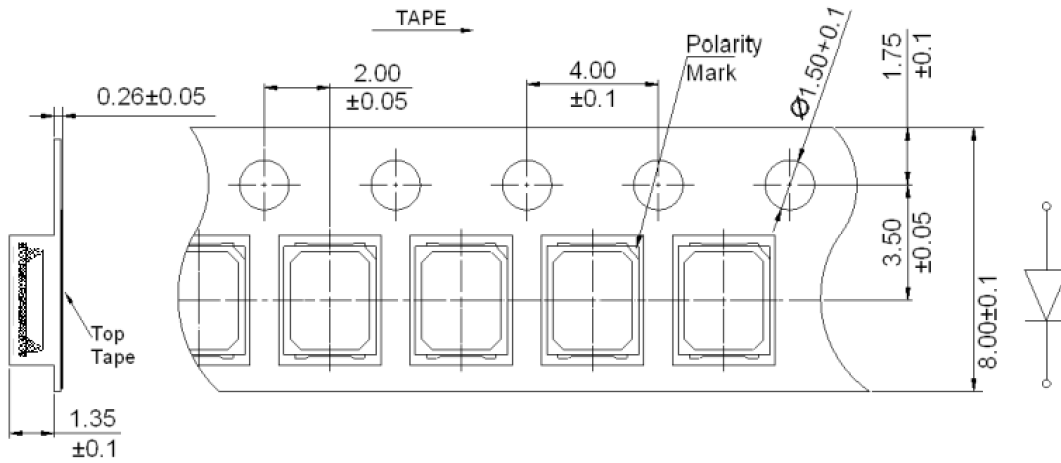
Item 项目	Test conditions 测试条件	Note 测试频率	Number of Damaged 损坏数量
Reflow 回流焊	Temp:260℃max T=10 sec	2 time	0/30
Thermal Shock 冷热冲击	-40~100℃ 30min, 10s, 30min	100cycles	0/30
High Temperature High Humidity Storage 高温高湿储存	Ta=60℃,RH=90%	300hrs	0/30
Steady State Operating life 常温通电	Ta=25℃,IF=60mA	1000hrs	0/30
Steady State Operating life of High Humidity Heat 高温高湿通电	Ta=60℃ RH=90%,IF=60mA	1000hrs	0/30
High Temperature Storage 高温储存	Ta=100℃	1000HRS	0/30
Low Temperature Storage 低温储存	Ta=-40℃	1000HRS	0/30

2. Criteria for Judging The Damage 失效判定标准

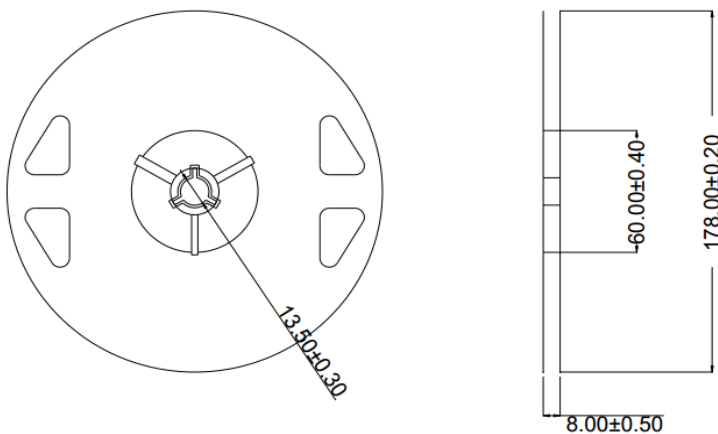
Item 项目	Symbol 符号	Test Conditions 测试条件	Criteria for Judgment 判定标准	
			Min.最小	Max.最大
Forward Voltage	V _F	I _F =60 mA	---	Initial Data ×1.1
Luminous Intensity	I _V	I _F =60 mA	Initial Data × 0.9	---
Reverse Current	I _R	V _R = 5V	---	Initial Data x2. 0

◆ Packaging Specifications 包装规格

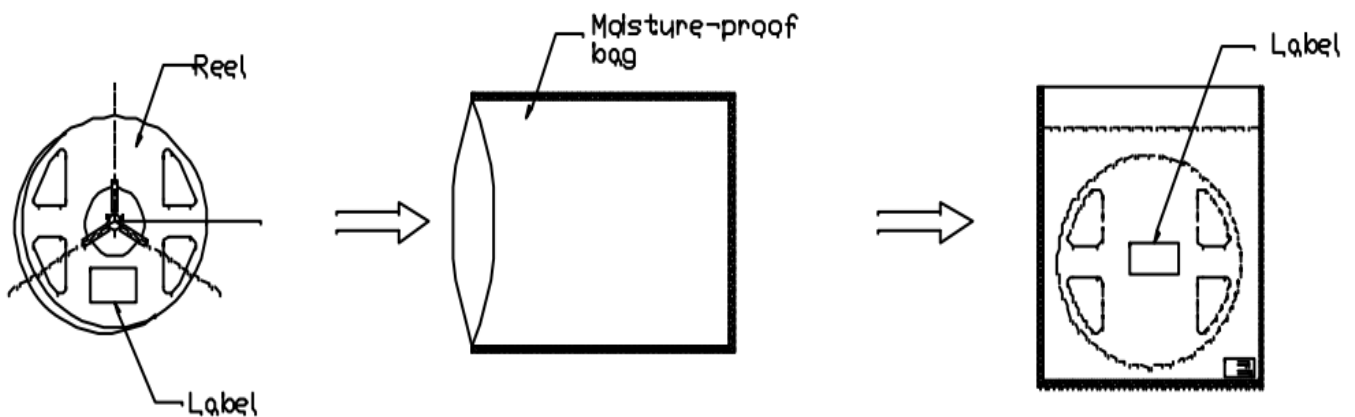
Dimensions of Tape 载带规格



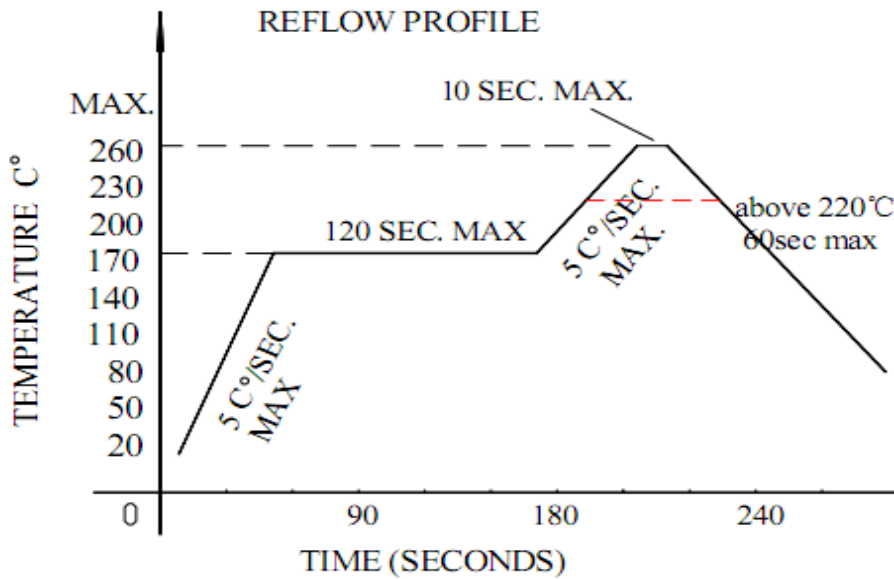
Dimensions of Reel 卷盘规格



Packaging specifications 包装规格



◆ SMT Reflow Soldering Instructions SMT 回流焊说明



1. Reflow soldering should not be done more than two times
回流焊不可以做两次以上
2. When soldering, do not put stress on the LEDs during heating
当焊接时，材料受热，不可以用力按压胶体表面

◆ Soldering iron 烙铁焊接

1. When hand soldering, keep the temperature of the iron under 300°C, and at that temperature keep the time under 3 sec.
当手工焊接时，烙铁的温度必须小于 300°C，时间不可超过 3 秒
2. The hand soldering should be done only one time,
手工焊接只可焊接一次

◆ Rework 维修

1. Customer must finish rework within 3 sec under 300°C

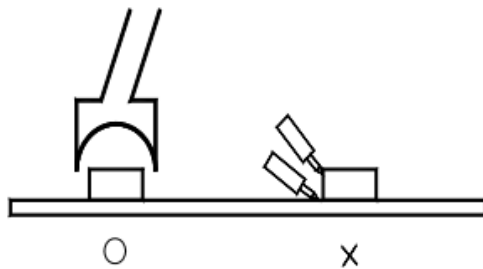
客户在维修时，烙铁温度控制在 300 度以下，且在 3 秒内完成。

2. The head of iron can not touch the resin

焊头不可以触碰到胶体表面

3. Twin-head type is preferred.

使用双头烙铁操作，如图所示。



◆ CARTIONS 注意事项

The encapsulated material of the LEDs is silicone .Therefore the LEDs have a soft surface on the top of package. The pressure to the top surface will be influence to the reliability of the LEDs. Precautions should be taken to avoid the strong pressure on the encapsulated part. So when using the picking the picking up nozzle,the pressure on the silicone resin should be proper.

LED 封装为硅胶，故 LED 胶体表面较软，用力按压胶体表面会影响 LED 可靠性，因此应有预防措施避免在封装的零件上的强大压力，当使用吸嘴时，胶体表面的压力应是恰当的。