



Approve Sheet

产品 /Product	LED	
型号/Part Number	IE-2835WW/WC-HB30-R80	
物料编码 (Material Code)		
客户规格/customer specification		
客户/Customer		
光通量 (lm) /亮度(mcd)	24-30lm	
电压/VF (V)	2.8-3.4V	
色区等级/Color Bin	30M 65M	
显色指数/CRI		
色容差/SDCM		
备注/remarks		
制定/Maker		
制作/Prepared	审核/Checked	客户回签/Customer Confirmation

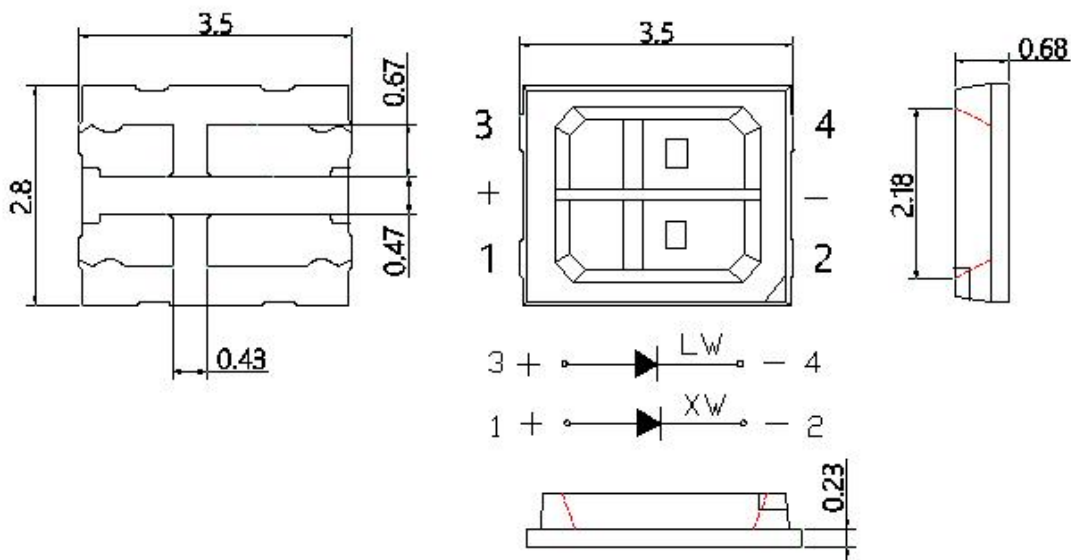
特性 (Feature)

- Size (mm) : 2.8*3.5mm
尺寸 (mm) : 2.8*3.5mm
- 0.4W Low Power LED
0.4W 小功率 LED 产品
- 高度: 0.68mm
Height (mm) : 0.68mm
- Suitable for all SMT assembly
And solder process.
适用于所有的 SMT 组装和焊接工艺
- Moisture sensitivity level: Level 4.
防潮等级 Level 4.

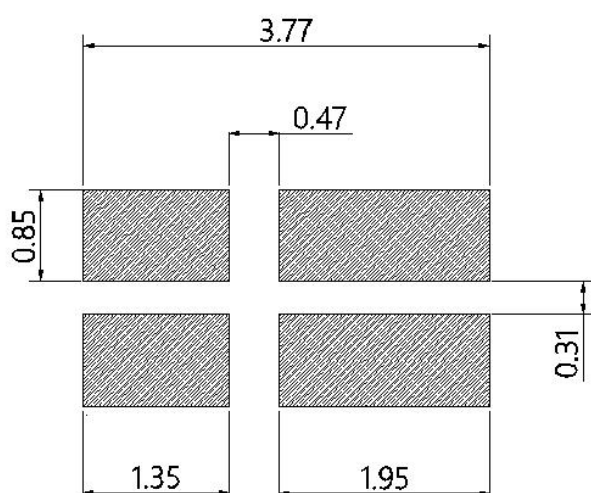
建议使用范围 (Suggested scope of use)

- ◆ Interior Decoration Lighting
室内装饰照明
- ◆ Outdoor landscape brightening
户外景观亮化

产品尺寸图 Product Structure diagram.



焊盘尺寸参考图，不建议完全复制



Notes: (备注)

All dimension units are millimeters, 公差为 $\pm 0.1\text{mm}$
所有标注尺寸单位为毫米, The tolerance was $\pm 0.1\text{mm}$.

材质说明 Material Description

型号 Part No.	芯片材料 Chip Materials	胶体类型 Lens Type
IE-2835WW/WC-HB30-R80	InGaN	黄色扩散状 Yellow Diffused

极限参数范围值 Absolute Maximum Ratings at TA=25°C

参数 (Parameter)	符号 (Symbol)	值 (Rating)	单位 (Units)
消耗功率 (Power Dissipation)	Pd	400	mw
连续工作电流 (Continuous Forward Current)	IF	2*60	mA
顺向脉冲电流 Pulsed Forward Current (1/10Duty Cycle, 0.1ms Pulsewidth)	IFP	2*90	mA
反向电压 (Reverse Voltage)	VR	5	V
静电 (Electrostatic Discharge) (HBM)	ESD	3000	V
操作温度 (Operating Temperature)	Topr	-40 to +85	°C
储存条件 Storage Condition	Tstg	-40 to +100	°C
	Humidity	<60	%
热阻 (Thermal Resistance)	Rthj-s	25	°C/W
结温 (Junction Temperature)	Tj	≤125	°C

备注 (Note) :

脉宽 0.1ms, 周期 1/10 (1/10 Duty cycle, 0.1ms pulse width.)

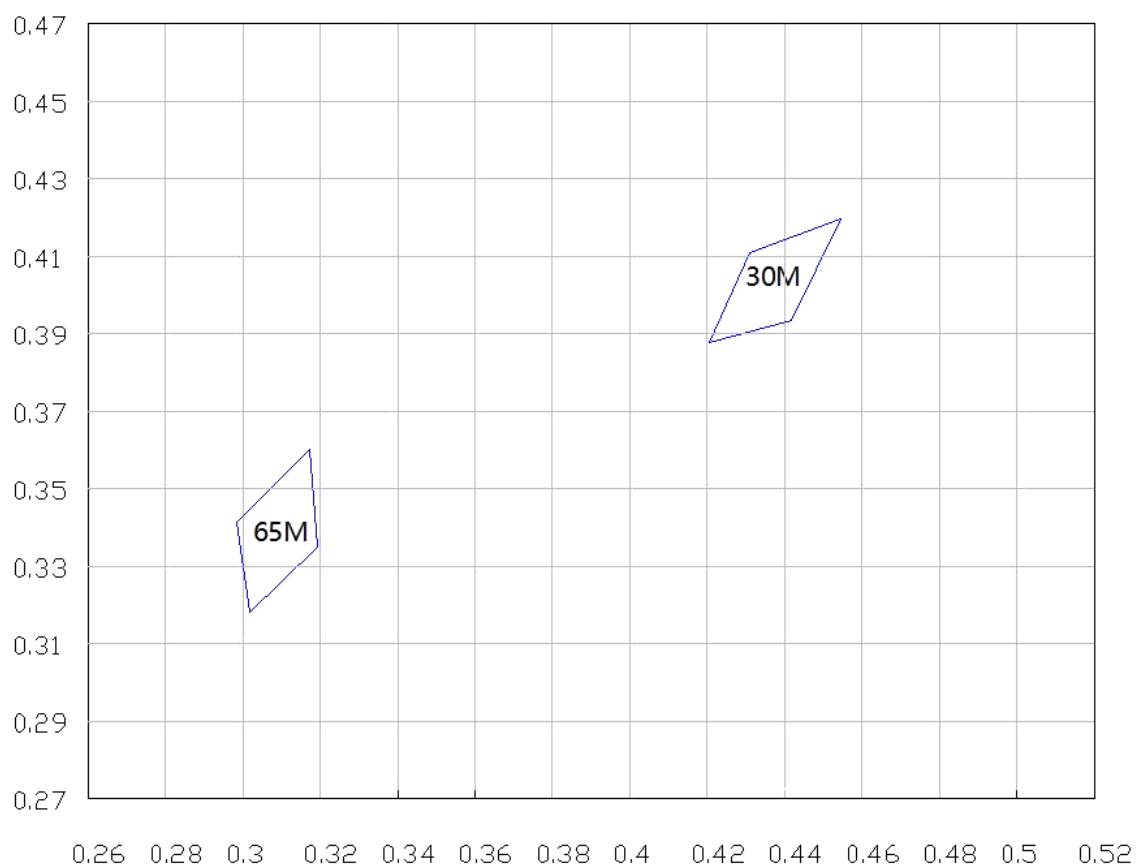
光电参数特性 Electrical / Optical Characteristics at TA=25°C

Parameter	符号 Symbol	最小值 Min	中间 值 Typ	最大值 Max	单位 Unit	测试条件 Test Condition
光通量 Luminous Intensity	IV	24	—	30	lm	IF=2*60mA
发光角度 Viewing Angle	2 θ 1/2		120		deg	Note 1
色温 Source Color	CCT	2850-3150 6100-6900			K	IF=2*600mA
显指 Color rendering index	Ra	80				IF=2*60mA
电压 Forward Voltage (R)	VF	2.8		3.4	V	IF=2*60mA
反向电流 ReverseCurrent	IR	—	—	10	μ A	VR=5V

Note（备注）：

- 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value
1/2 是半值角, 指光强是光学中心线光强的 1/2 处到光学中心线的角度
- The above luminous flux measurement allowance tolerance is $\pm 15\%$.
上述发光通量的测试允许公差为 $\pm 15\%$
- The above Color Rendering Index measurement allowance tolerance is ± 2
以上显色性指数的测试允许公差为 ± 2
- The above forward voltage measurement allowance tolerance is $\pm 0.1V$
以上所示电压测量误差 $\pm 0.1V$

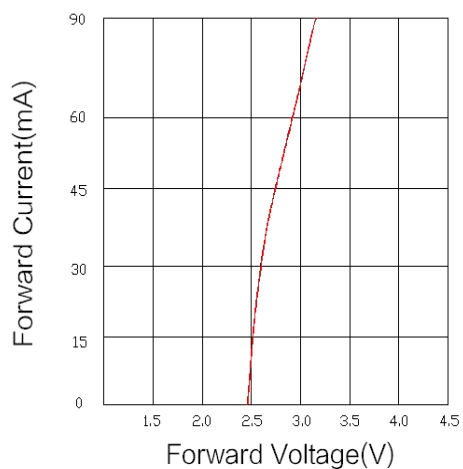
Bin 区分类及色坐标范围 Bin Range of Chromaticity Coordinate



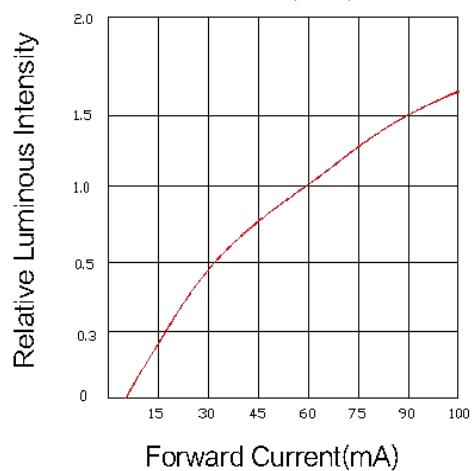
色温 CCT	BIN 代码	CIE_x	CIE_y
2850-3150K	30M	0.4309	0.4111
		0.4545	0.4198
		0.4416	0.3935
		0.4206	0.3877
6100-6900K	65M	0.3035	0.3341
		0.3177	0.3471
		0.3194	0.3273
		0.3070	0.3153

典型光学特性曲线 Typical optical characteristics curves

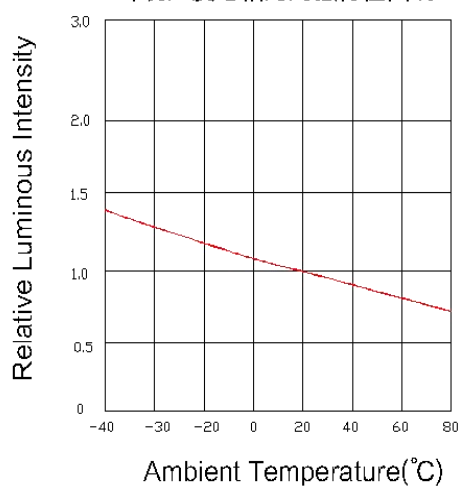
Forward Voltage VS. Forward Current
正向电压与正向电流特性曲线



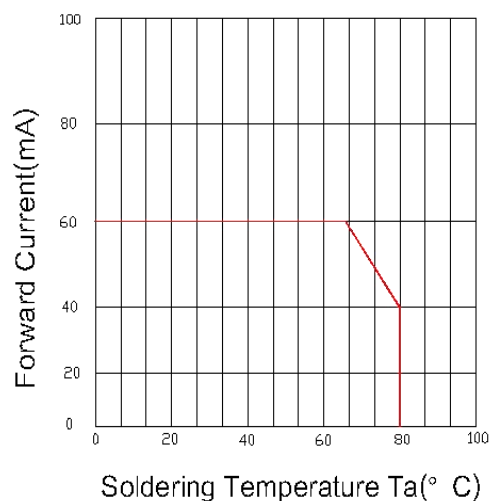
Forward Current VS. Relative Intensity
正向电流与相对光强特性曲线



Ambient Temperature VS. Relative Intensity
环境温度与相对光强特性曲线

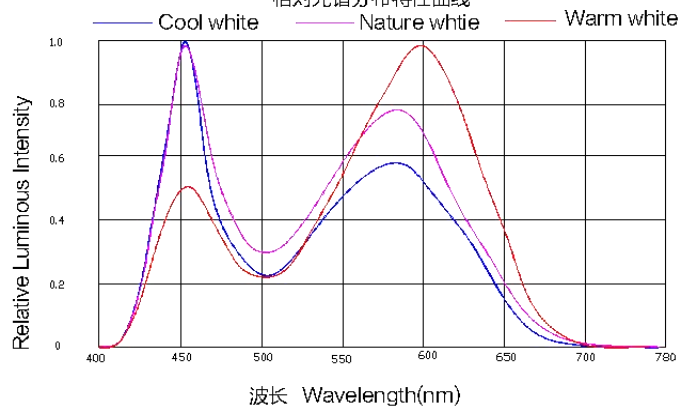


Soldering Temperature VS. Forward Current
焊盘温度与正向电流特性曲线



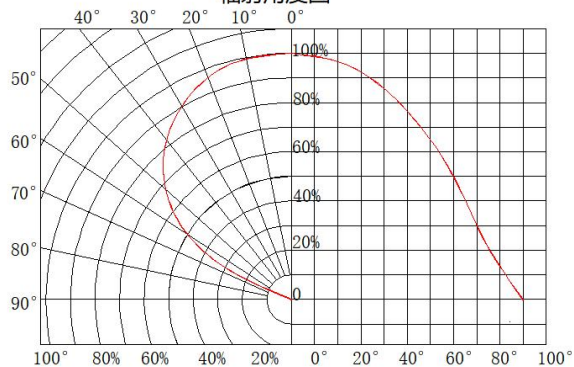
Relative Spectral emission

相对光谱分布特性曲线



Radiation diagram

辐射角度图



信赖性测试项目及条件 Reliability Test Items And Conditions

Test Items 项目	Ref. Standard 参考标准	Test Condition 测试条件	Time 时间	Quantity 数量	Ac/Re 接收/拒收
回流焊 Reflow	IEC/TR 60068-3-12-2014	Temp:260℃ max T=8 sec	3 times	22PCS	0/1
温度循环 Temperature Cycle	IEC60068-2- 14 : 2009	85℃±5℃ 15min ↑↓5 min -40℃±5℃ 15min	100Cycles	22PCS	0/1
高温高湿老化测试 High Humidity Heat Life Test	IEC60068-2-78: 2001	Ta=85℃ RH=85% IF=2*60mA	500H	22PCS	0/1
高温储存 High Temperature Storage		Temp:100℃±5℃	1000H	22PCS	0/1
低温储存 Low Temperature Storage	IEC60068-2-1: 2007	Temp:-40℃±5℃	1000H	22PCS	0/1
常温通电老化 Life Test		Ta=25℃±5℃ IF=2*60mA	1000H	22PCS	0/1

失效判定标准 Failure Criteria

项目 Test Items	符号 Symbol	测试条件 Test Condition	判定标准 Failure Criteria	
			最小 (MIN)	最大 (MAX)
正向电压	VF	IF=2*60mA	--	U. S. L*) x1.1
反向电流	IR	VR = 5V	--	10uA
光通量	Im	IF=2*60mA	L. S. L*) x0.7	

U. S. L: Upper Specification Limit 规格上限

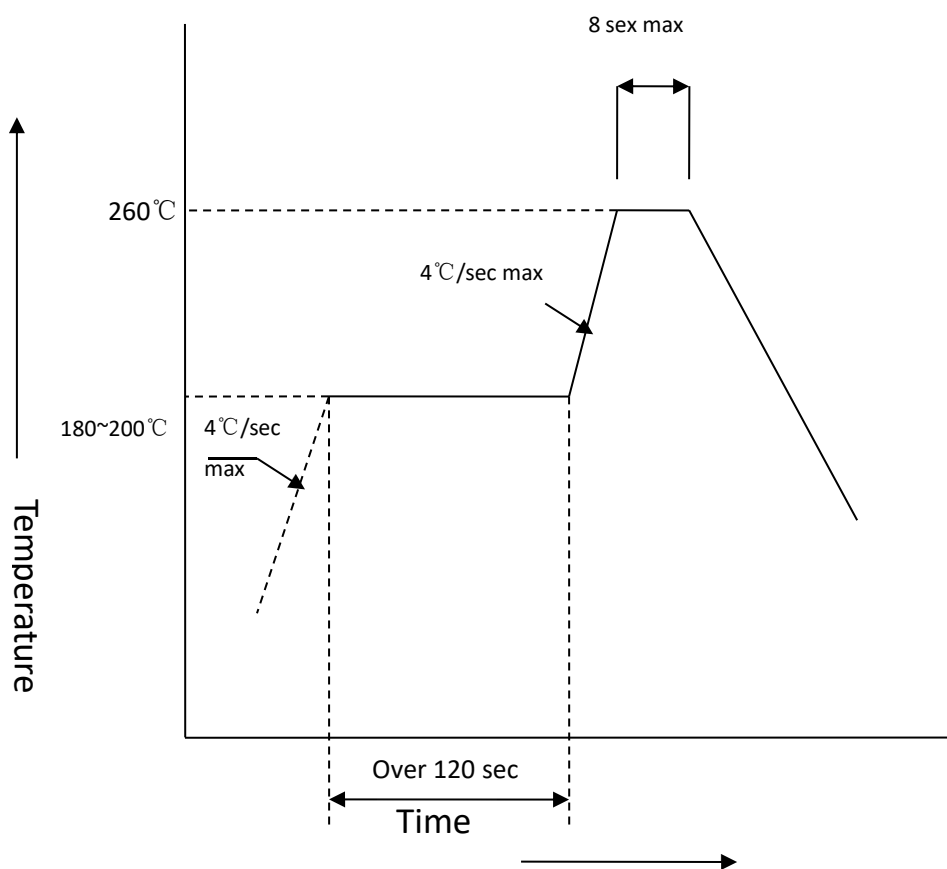
L. S. L: Lower Specification Limit 规格下限

回流焊说明 SMT Reflow Soldering Instructions SMT

回流焊说明 Reflow Soldering Instructions

本产品最多只可回焊一次 Number of reflow process shall be less than 1 times

无铅回焊 Lead-Free Solder

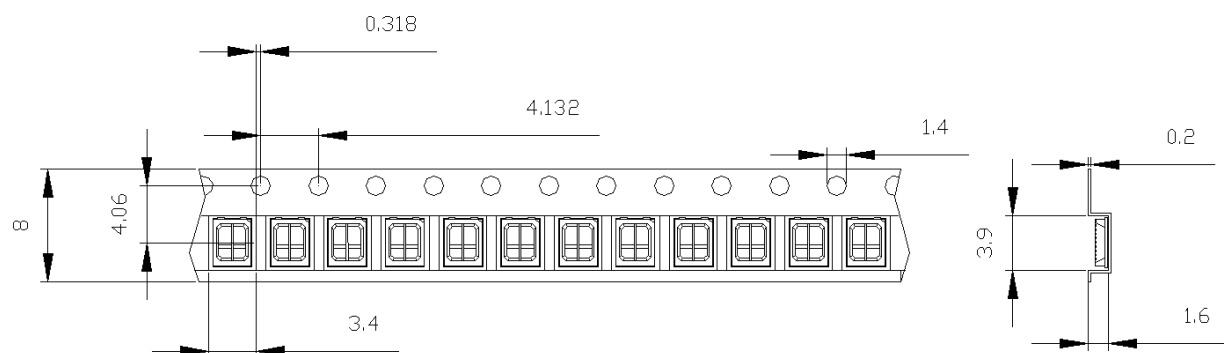


焊接注意事项： 建议使用高温锡膏（无铅）进行焊接。

包装 Packing

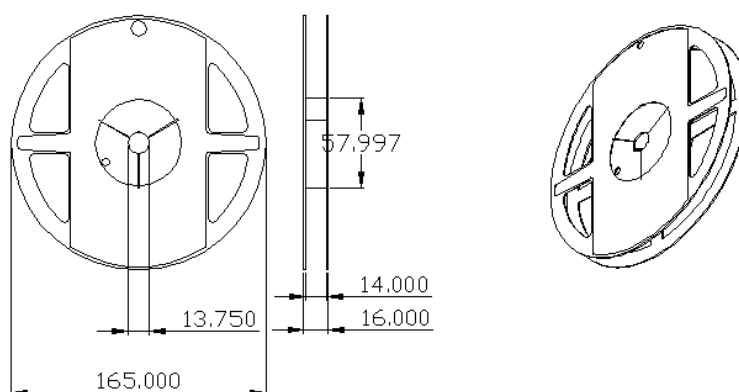
载带规格 (单位: mm) Tape Specifications (Units : mm)

Packing unit 3006PCS/reel

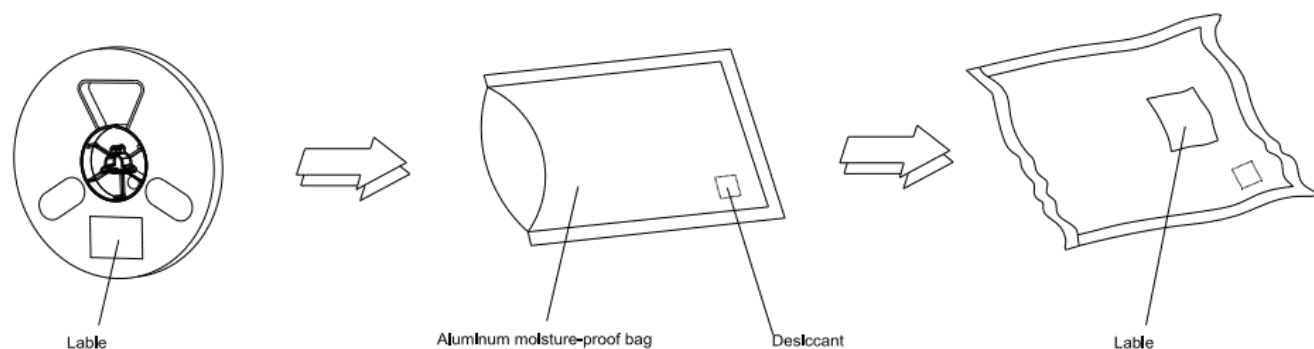


Adhesion Strength of Cover Tape : Adhesion strength to be 0.1 – 0.7N when the cover tape is turned off from the carrier at 10° angle to be the carrier tape. (盖带力度: 当盖带与载带成10度角时力度为0.1 – 0.7N)

卷轴尺寸 Reel Dimensions



防潮带包装 Moisture Resistant Packaging



SMD LED Instruction Manual

1. Material confirmation

Please check the package for leaks, other damage, and check if the label matches your company's requirements. If you find an abnormality, please contact us in time.

2. Unopened smd led storage

The unopened smd led should not be stored for a long time as much as possible, because the storage environment is not easy to control. You can choose a recent delivery based on your order. The storage environment is best to choose moisture-proof cabinet, the temperature is about 30 degrees, the humidity is below 60%, in this case RGB products can be stored for 30 days, white light products can be stored for 60 days.

Regardless of whether the storage time is exceeded or not, be sure to perform the first test before production. If you find a problem, please contact us as soon as possible.

3. Precautions after unpacking

After receiving the smd led of our company, please arrange the production as soon as possible. Due to the different storage environments of each warehouse, it is not recommended to make large quantities of stocks. Please use up the product within 24 hours after opening the package. It is recommended to perform 60 degree low temperature baking for 12-24 hours before use.

4. It is not recommended to mix different batches of smd led

Test before the production according to the first inspection standard. If you find any abnormality in the smd led, please contact us. Please do not mix different batches of smd led during the production process. If you can't avoid it, you need to use the leds of the previous batch. Please confirm the package is normal, and then confirm the first piece. Finally, the products produced by this batch of smd led are separately distinguished.

5. It is not recommended to store the smd led after unpacking. Please accurately calculate the demand for the production line. If storage is required, it is recommended to store in a 60 degree oven.

In the production process, please fill in the reflow soldering after the patch is completed, and the reflow soldering is not repeatable.

6. Reflow soldering. Check the ESD protection measures during soldering and assembly.

7. smd led for outdoor application, the finished product design is to use a cover lens as much as possible, and then potting seal. It is not recommended to seal directly on the surface of the lamp. The potting glue should try to choose a glue with low permeability and oxygen permeability and good adhesion to aluminum. The controller's negative pressure should be minimized.

8. Finished luminaires that have been installed outdoors. If the luminaires cannot be used in time after commissioning, please pay attention to the timing aging. Please use a small current to illuminate all the chips in the early stage of aging. Do not scan the program. After aging for two hours, the current is gradually amplified, do not scan the program, and often aging for 4 hours once a month. In the initial stage of use, please adjust the speed of the controller to the slowest and the color conversion speed is the slowest.