

承认书

SPECIFICATION FOR APPROVAL

客户名称 Customer:

产品名称 Description: Top View 5730 LED

产品型号 Model: TGC-5730 植物灯 660 全光谱 (缺口负极)

制作日期 Date:

制造编码 Date:

制作 Prepared By	审核 Checked By	市场部 Marketing Dept.

客户确认 APPROVED SIGNATURES		
采购部 Purchase Dept.	品质部 Quality Dept.	技术部 Engineering Dept.

※产品特征 Features

1.外型尺寸：5.7×3.0×0.9mm

Outline Package: 5.7×3.0×0.9mm (Top View White LED)

2.发光颜色：粉红光

Emitted Color: White

3.封装胶水：硅胶

Encapsulating Resin: Silicon Resin

4.适用于所有表面贴装技术组装生产

Suitable for all SMT assembly methods

5.完全符合 ROHS 指令

Comply with RoHS

※产品应用Applications

1. 室内室外 光学指示

Indoor and outdoor displays

2. 背光

Backlighting

3. 汽车内部照明

Interior automotive lighting

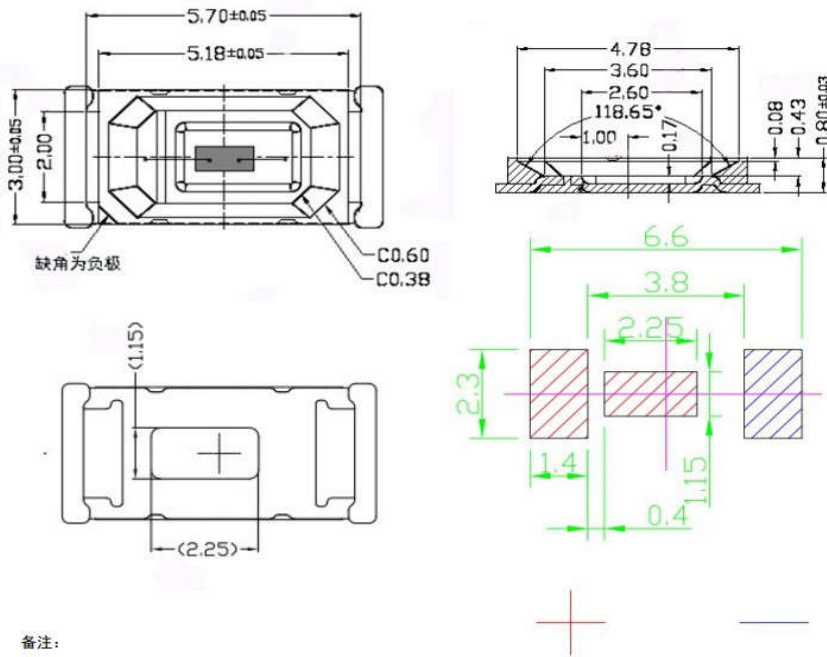
4. 信号照明

Signal and symbol luminaire



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

产品尺寸图:



备注:
1. 有标注尺寸的单位均为毫米

1. All dimensions are in millimeters (inches);

单位: 毫米 (英寸)

2. Tolerances are $\pm 0.2\text{mm}$ (0.008inch) unless otherwise noted.

未标公差处公差为 0.2mm(0.008 英寸)

※最大绝对额定值 **Absolute maximum ratings at Ta=25°C**

参数名称 Parameter	符号 Symbol	数值 Value	单位 Unit
功率耗损 Power dissipation	Pd	500	mW
正向电流 Forward current	I _F	150	mA
脉冲电流[1] Peak pulsing current	I _{FP}	400	mA
最大反向电压 [2] Reverse Voltage	V _R	5	V
工作温度范围 Operating temperature range	Topr	-20~85	°C
贮存温度范围 Storage temperature range	Tstg	-20~85	°C
最大节点温度 Junction Temperature	T _J	125	°C

回焊条件 Reflow Soldering Condition	Ta	260/10s Max.	°C
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[1] 无齐纳时反向电压项目有效 It is available when without zener on VR

[2] I_{FP} 条件: 脉冲持续时间≤10msec, 占空因素≤1/10

I_{FP} Conditions: Pulse Width≤10msec. and Duty cycle≤1/10.

※电光特性 **Electrical-optical characteristics at Ta=25°C**

参数名称 Parameter	符号 Symbol	测试条件 Test conditions	Min.	Typ.	Max.	单位 Unit
正向电压 Forward voltage	V _F	I _F =150mA	3.0	3.2	3.4	V
光通量 luminous flux	ϕ	I _F =120mA	5	6	7	lm
光通量 luminous flux	ϕ	I _F =150mA	6	7	8	lm
色度坐标 Chromaticity coordinate	X	I _F =150mA	-	0.315	-	/
	Y		-	0.33	-	/
显色性 Ra	Ra	I _F =150mA	0	0		-
半功率角 Viewing angle at 50% I _v	2θ _{1/2}	I _F =150mA	-	120	-	deg
反向电流 Reverse current	I _R	V _R =5V	-	-	10	μA

NOTE:

1. Tolerance of luminous flux is ±10%

2. 光通量公差为±10%

2. Tolerance of forward voltage is ±0.05V

正向电压公差±0.05v

3. CCT Tolerance ±200K

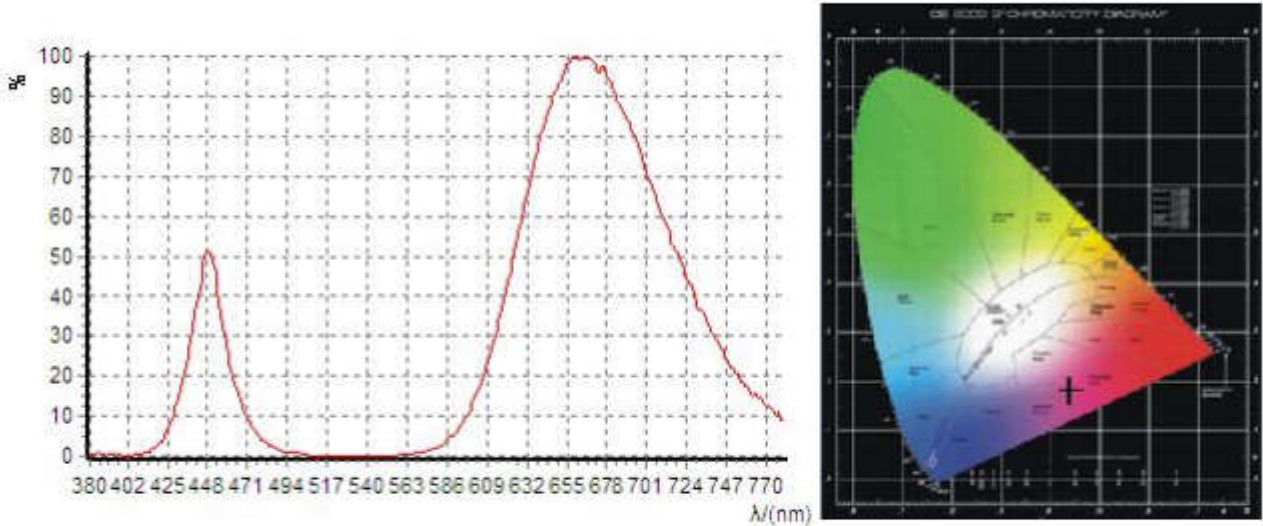
色温差 ±200K

※典型光电参数曲线 Typical Electrical / Optical Characteristics Curves

(环境温度 25 Ambient Temperature)

测试设备:	ZWL-600 光电综合测试系统	
测试标识	产品型号:	制造厂商:
	环境温度:	环境湿度:
	测试员:	测试日期:
	测试机构:	

光谱相对能量分布曲线



光谱参数		光电参数		
峰值波长:	661.0 nm	点亮电流:	0.1 mA	
主波长:	-511.8 nm	预热时间:	500 ms	
质心波长:	599.8 nm	测试电流:	150.0 mA	
中心波长:	604.0 nm	正向电压:	3.11 V	
半波宽:	96.0 nm	光通量:	7563.0 mIm	
色温:	K	光效率:	16.212 lm/w	
色品坐标(x, y):	0.4429, 0.1777	Ra1:0.0	Ra2:0.0	Ra3:0.0
色品坐标(u, v):	0.4173, 0.2510	Ra4:0.0	Ra5:0.0	Ra6:0.0
显色指数:	0.0	Ra7:0.0	Ra8:0.0	Ra9:0.0
色纯度:	0.812	Ra10:0.0	Ra11:0.0	Ra12:0.0
光功率:	155.2075 mw	Ra13:0.0	Ra14:0.0	Ra15:0.0

※ **BIN** 区设置 **BIN Range**

1.正向电压分档@IF=60mA Forward Voltage Bin Code List

* 正向电压测量精度公差±5%。

Voltage

measurement

allowance: ±5%

正向电压 $V_F(V)$ Forward Voltage		
V_F Bin code	Min.	Max.
2G	3.0	3.2
2H	3.2	3.4
2J	3.4	3.6

2. 光通量分档@ $I_F=60mA$ luminous flux Bin Code List

光通量 ϕ (lm) luminous flux		
Iv Bin code	Min.	Max.
X2	4	5
Y1	5	6
Y2	6	7
Z1	7	8

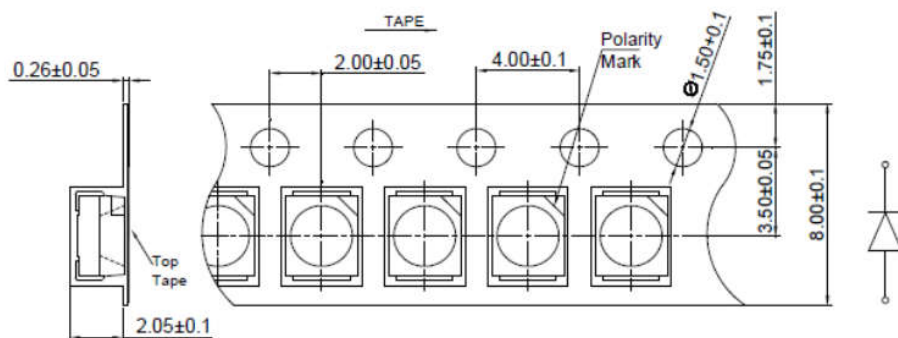
1. Tolerance of luminous flux is $\pm 10\%$

光通量公差为 $\pm 10\%$

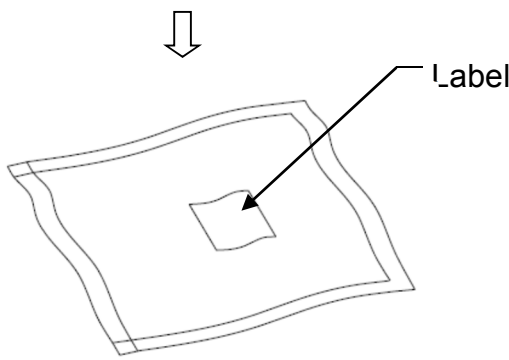
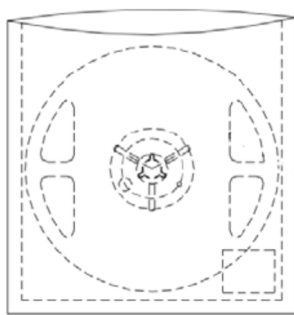
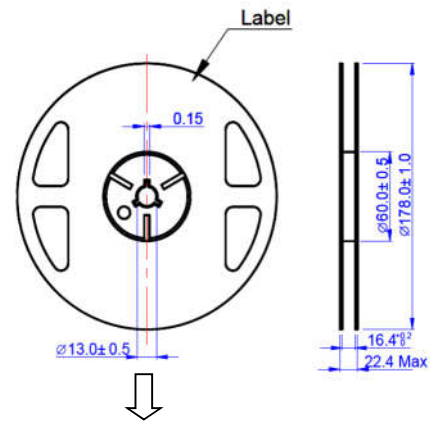
※包装规格 Packaging Specifications

1. 包装载带尺寸 Package Dimensions of Tape (unit: mm)

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



2. 卷盘尺寸 Dimensions of Reel (Unit: mm)



※ 处理预防 Handling precautions

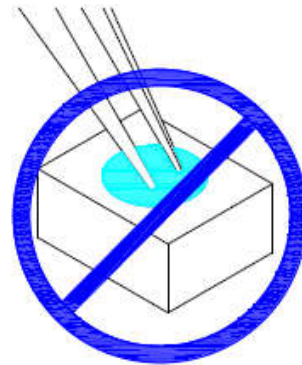
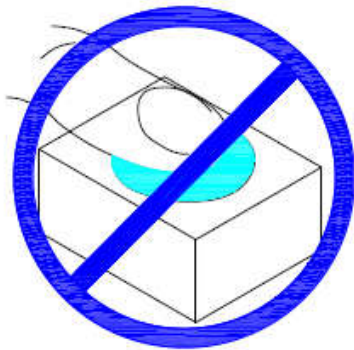
1. 处理元件沿着端面借用镊子或适当工具

.Handle the component along the side surface by using forceps or appropriate tool:



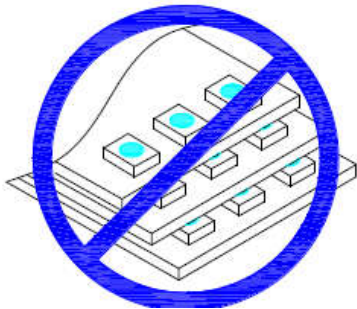
2. 不直接用手或工具接触硅胶或透镜表面，它可能损害内部电子线路

Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry



3. 不将发光二极管叠堆一起，它可能会刮损硅胶或透镜

Do not stack together assembled PCBs containing LEDs. Impact may scratch the silicone lens or damage



4. 不适合在酸性的环境中使用

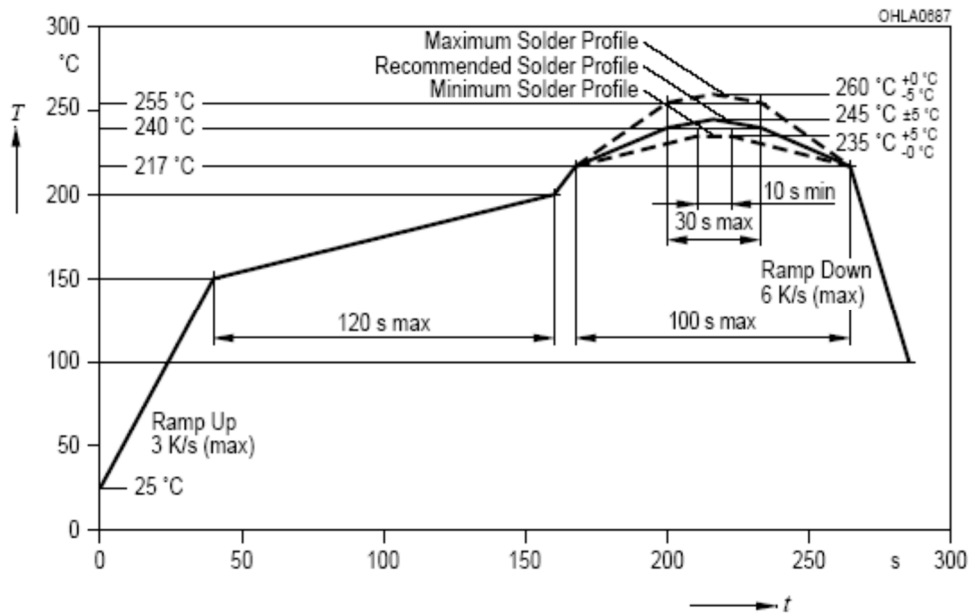
Not available in the situation of acidity for PH



※注意事项Precautions for use

回流焊规范Reflow Profile

无铅产品回流焊温度条件曲线规范 Pb-free Solder temperature Profile



Note: a) 材料焊接次数不超过2 次。

Reflow soldering should not be done more than two times.

b) 焊接时请不要重压LED 灯。

Do not put stress on the LEDs when soldering.

c) 焊接后温度未回降到常温时请勿扭曲线路板。

Do not warp the circuit board before it have been returned to normal ambient conditions after soldering.

手工焊接规范 Hand Soldering Profile

手工焊接时，烙铁温度不高于300□，每个焊脚焊接时间不超过3 秒，只能焊接一次。（**不建议手工焊接**）。

The temperature of the iron should be lower than 300□ and soldering within 3sec per solder-pad is to be observed. The hand solder should be done only one times (Not recommended by welding)

贮存规范 Storage Profile

1. 请在未准备使用LED 之前不要打开防静电袋子。

Do not open the moisture proof bag before ready to use the LEDs.

2. LED 在未开封之前应保存在30□以下，湿度在60%以下的环境中，最长保存期为1 年。

The LEDs should be kept at 30□ or less and 60%RH or less before opening the package.

The max. storage period before opening the package is 1 year.

3. 打开包装待后，LED 需保存在30□/40%湿度以下的条件，且必须在3天内使用完。

After opening the package, the LEDs should be kept at 30□/40%RH or less, and it should be used within 3 days.

4. 如果 LED 超出了第 3 点要求，则 LED 必须经过烘烤才能使用，烘烤条件为：70±5□,8 个小时。

If the LEDs be kept over the condition of 3, baking is required before mounting. Baking condition as below: $70 \pm 5^\circ\text{C}$

for 8 hours.