

承 认 书

SPECIFICATION FOR APPROVAL

产品型号:

Model. P/N NO: JHX-020 橙光

客 户:

Customer:

客户料号:

Customer Part No. :

文件编号:

Documents No.:

送承认日期:

SAMPLE DATE: 2018-05-14

客户承认签核栏

CUSTOMER AUTHORIZED SIGNATURE

核 准 Checked	审 核 Verify	承认人 approve by

Pleas retun to us oen copy of “SPECIFICATION FOR APPROVAL” With you approved Signatu 客户签字确认, 盖章后请回传一份承认书我司

晶宏欣送承认确认栏

JHX-CONFIRM THE SIGNATURE

核 准 Checked	审 核 Verify	制作人 MAKER
方祥令		李炳阳

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Description (描述)

■ 3.8×0.6mm 贴片发光二极管 3.8×0.6×1.0mm Top SMD

■ 胶体颜色 Colloid Color: 黄 Yellow

■ 发光颜色 Emission Color: 橙

■ 半功率角度 Viewing Angle :120°

Features (特征)

Extremely wide viewing angle(宽的发光角度)

Suitable for all SMT assembly and solder process. (适用于的所有的SMT装配和焊接工艺)

Available on tape and reel(可用在载带及卷轴上)

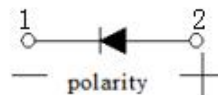
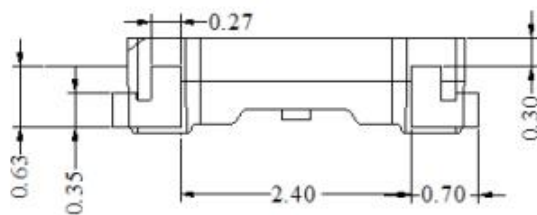
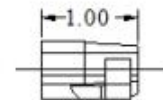
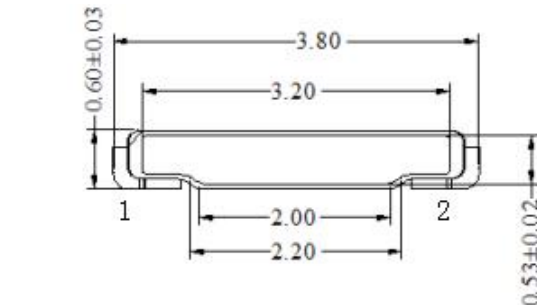
Moisture sensitivity level: Level 4(防潮等级Level 4)

Applications (用途)

- Optical indicator(光学指示)
- Indoor lighting(室内照明)
- Mechanical keyboard(机械键盘应用)
- Light pipe application (日光灯管)
- Advertisement(广告应用)



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Package Dimensions (封装尺寸)**Recommended Soldering PATTERN**

Recommended soldering pad design

Notes:

1. All dimension units are millimeters. (所有标注尺寸的单位均为毫米)

2. All dimension tolerance is ±0.15mm unless otherwise noted. (除了特别注明,所有标注尺寸的公差均为±0.15mm)

Electrical / Optical Characteristics at Ta=25°C 电性与光学特性

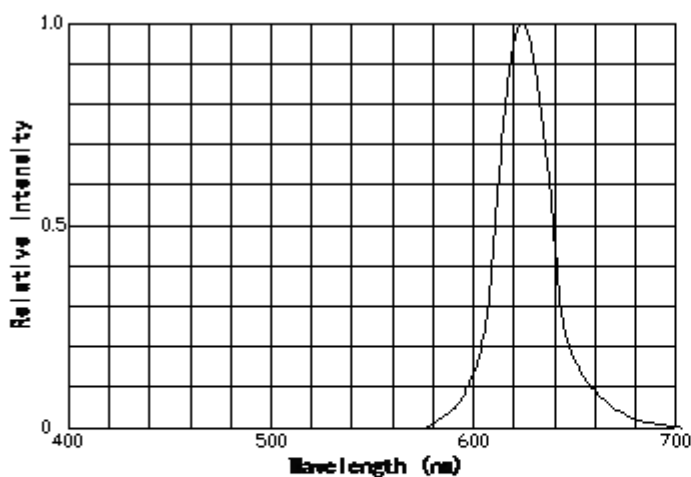
Parameter (参数)	Symbol (符号)	Min. (最小)	Typ. (平均)	Max. 最大)	Units (单位)	TestConditions 测试条件
Forward Voltage (正向电压)	VF	2.6	--	3.4	V	IF=5mA
Luminous intensity (发光强度)	IV	300		500	mcd	IF=5mA
Color Temperature (主波长)	λ_d	600		610	nm	IF=5mA
Viewing Angle 角度	2 θ 1/2			120°	deg	IF = 5mA (Fig.6)
Reverse Current (反向电流)	IR	--	--	1	μ A	VR = 5V

Absolute Maximum Ratings at Ta=25°C 绝对最大额定值

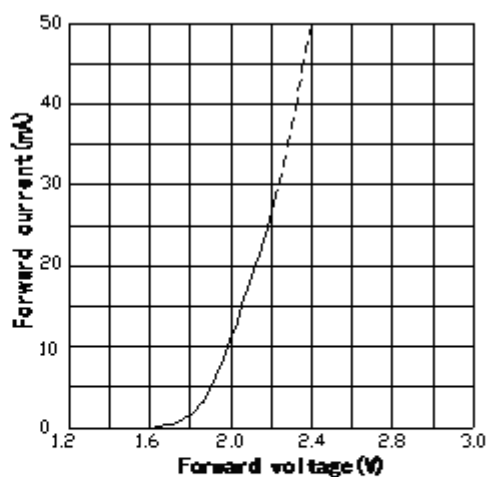
Parameter (参数)	Symbol (符号)	Rating (值)	Units (单位)
Power Dissipation (功耗)	Pd	90	mW
DC Forward Current (直流正向电流)	IF	30	mA
Peak Forward Current [1] (峰值正向电流)	IFP	100	mA
Reverse Voltage (反向电压)	VR	5	V
Electrostatic Discharge (HBM) (静电)	ESD	2000	V
Operating Temperature (操作温度)	Topr	-40 ~ +85 °C	°C
Storage Temperature (保存温度)	Tstg	-40 ~ +100 °C	°C

Typical optical characteristics curves 典型的光学特性曲线

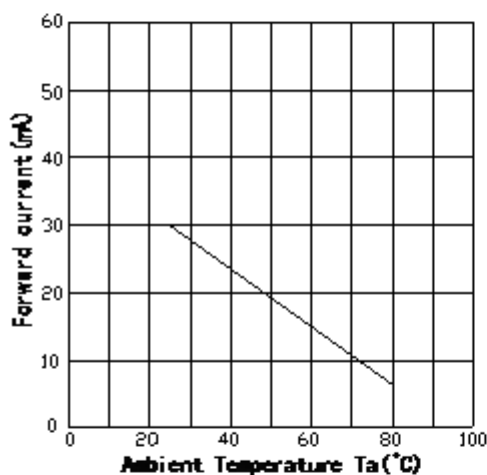
Relative Intensity vs. Wavelength



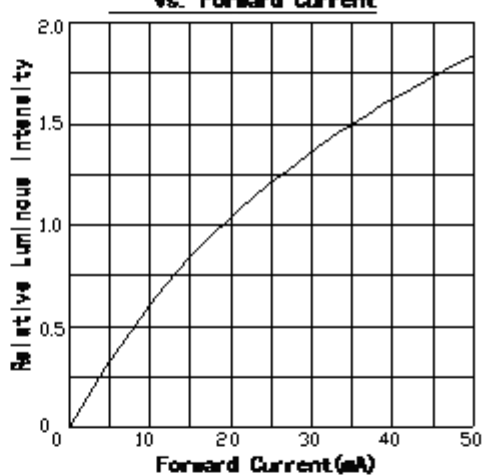
Forward current vs. Forward voltage



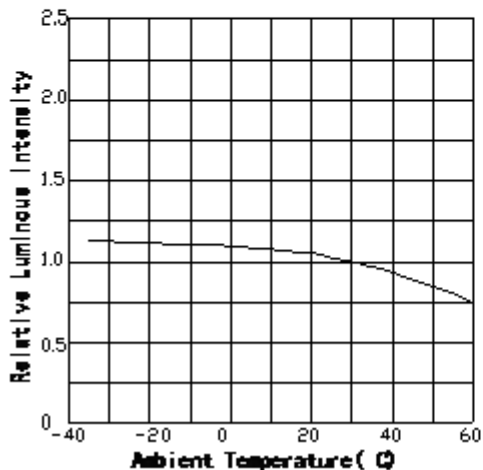
Forward current Derating Curve



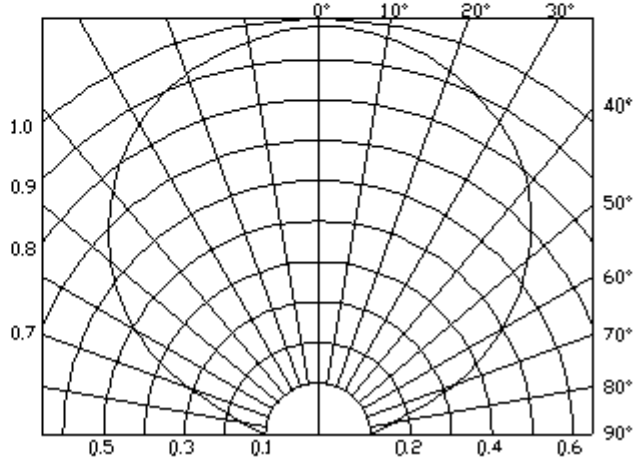
Relative Luminous Intensity vs. Forward Current



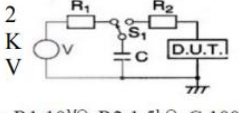
Luminous Intensity vs. Ambient Temperature



Radiation Diagram



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

No.	Items 项目	Ref.Standard 判定标准	Test Condition 测试条件	Test Hours/ Cycles	Sample Size 样品数量	Ac/Re OK/NG
1	Reflow 回流焊	JESD22-B106	Temp:260℃max,T=10 sec	3 times.	50Pcs	0/1
2	Temperature Cycle 温度循环	JESD22-A104	80℃±5℃ 30 min.↑↓5 min,-40℃±5℃ 30 min.	100 Cycles	50Pcs	0/1
3	静电放电试验 (ESD) 人体模型(HBM)	JESD22-A114	 - R1:10MΩ, R2:1.5kΩ, C:100pF	20 times	50Pcs	0/1
4	High Temperature Storage 高温保存	JESD22-A103	Temp:100℃±5℃	1000Hrs.	50Pcs	0/1
5	Low Temperature Storage 低温保存	JESD22-A119	Temp:-40℃±5℃	1000Hrs.	50Pcs	0/1
6	DC Operating Life 常温通电	JESD22-A108	Ta=25℃±5℃ IF=20mA	1000Hrs.	50Pcs	0/1
7	High Temperature High Humidity 高温高湿通电	JESD22-A101	85℃±5℃/ 85%RH IF=5mA	240Hrs.	50Pcs.	0/1

*The technical information shown in the data sheets are limited to the typical characteristics and circuit examples of thereferenced products. It does not constitute the warranting of industrial property nor the granting of any license.

数据的工作表中所示的技术信息仅限于典型特征和电路实例的引用的产品。它并不构成值得工业产权也不给予任何许可。

SMT Reflow Soldering Instructions SMT 回流焊说明

(1) 焊接条件 Soldering Conditions

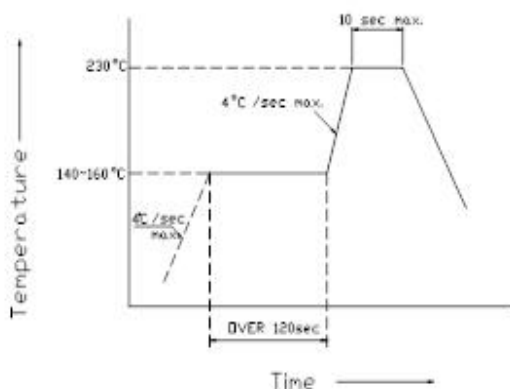
本产品最多只可回焊两次,且在首次回焊后须冷却至室温之后方可进行第二次回焊.

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

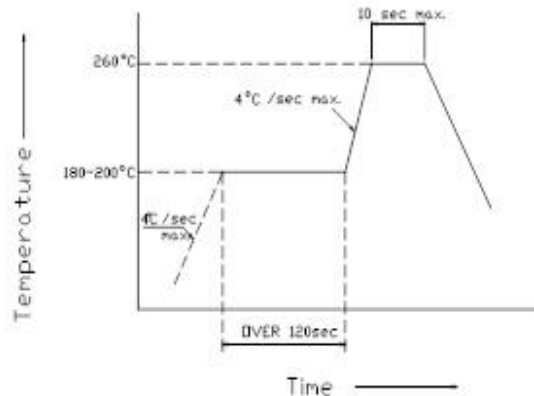
推荐焊接条件(Recommended soldering conditions)

回流焊接 Reflow Soldering			手工焊接 Hand Soldering	
	有铅Lead Solder	无铅 Lead-free Solder	温度Temperature	330°C Max.
预热温度Pre-heat	140 ~ 160°C	180 ~ 200°C	焊接时间Soldering time	3 sec. Max.
预热时间Pre-heat time	120 sec. Max.	120 sec. Max.		(one time only)
峰值温度Peak temperature	230°C Max.	260°C Max.		
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)



Soldering iron 烙铁

1. When hand soldering, the temperature of the iron must less than 330°C for 3 seconds

当手工焊接时,烙铁的温度必须小于330°C,时间不可超过3秒

2. The hand solder should be done only one times

手工焊接只可焊接一次

Label 标签

Lm: Luminous intensity rank 亮度等级

VF: Forward voltage rank 电压等级

TC: Color temperature 色温

CHIP LED

TYPE: GTGXXXXXXX XX

λd: xxx-xxx

QTY: XXXXPCS

IV: xxx-xxx

VF: xx-xx

LOT: 

QC:

(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: $I_F=0.5\text{mA}$ 时, $V_F > 2.0\text{V}$

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 : ($V_F > 2.0\text{V}$ at $I_F=0.5\text{mA}$)

(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

在真空包装时,LED 在温度为 30°C 或更低湿度 60%RH 以下,可保存六个月.

Before opening the package ,The LEDs should be kept at 30°C or less and 60%RH or less. The LEDs should be used within Six monthsr.

(5) 打开包装之后,应在 7 天内焊接完毕.

After opening the package, The LEDs should be soldered within 7days after opening the package.