

承 认 书

SPECIFICATION FOR APPROVAL

客 戶:

CUSTOMER

品 名: 0603红光贴片LED灯

DESCRIPTION

型 號: HQ-0603URC

MODEL

日 期: 2016.02.26

DATE

承 制 方

MANUFACTURER:

制 表 DRAFTING	审 核 CHECK	核 準 APPROVE
李丽		

使 用 方

USER:

核 準 APPROVE	簽 章

Features

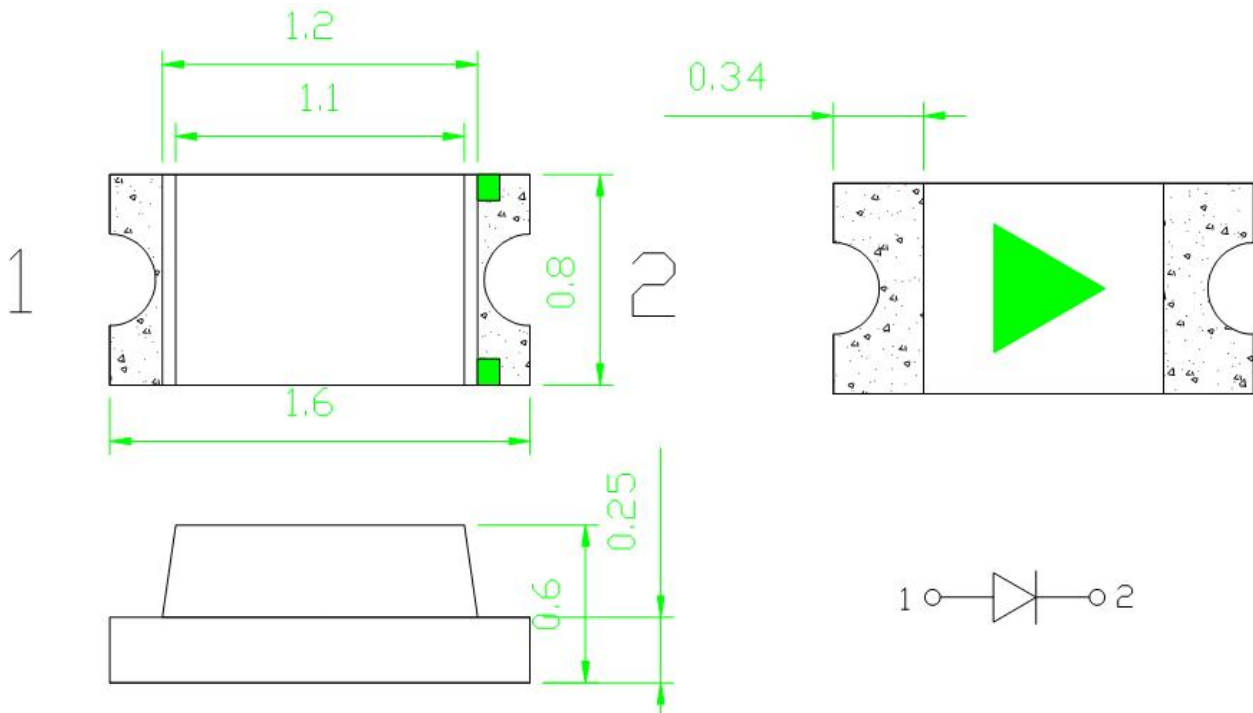
- _ 1.6mmX0.8mm SMT LED, 0.60mm THICKNESS.
- _ LOW POWER CONSUMPTION.
- _ WIDE VIEWING ANGLE.
- _ IDEAL FOR BACKLIGHT AND INDICATOR.
- _ VARIOUS COLORS AND LENS TYPES AVAILABLE.
- _ PACKAGE: 4000PCS / REEL.
- _ RoHS COMPLIANT.



Description

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
HQ-0603URC	RED	WATER CLEAR	70	150	120

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	RED	617	625	nm	IF=20mA
λD	Dominant Wavelength	RED			nm	IF=20mA
Δλ1/2	Spectral Line Half-width	RED	25		nm	IF=20mA
C	Capacitance	RED	105		pF	VF=0V;f=1MHz
VF	Forward Voltage	RED	1.9	2.2	V	IF=20mA
IR	Reverse Current	RED		2	uA	VR = 7V

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

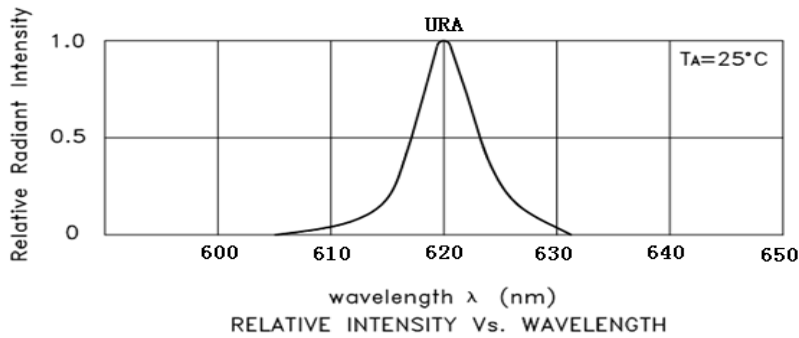
Note: Accuracy may depend on the sorting parameters

Absolute Maximum Ratings at TA=25°C

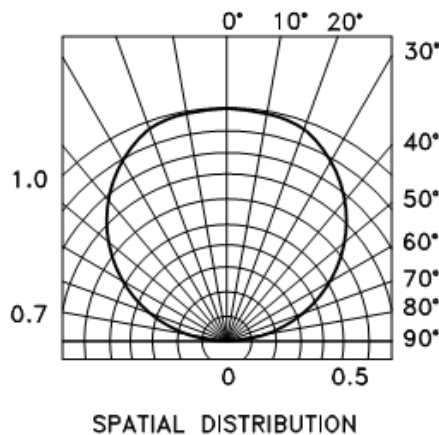
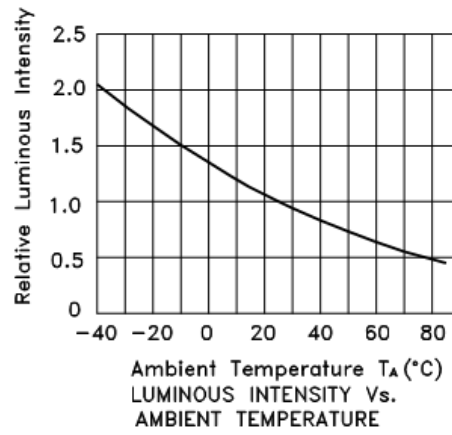
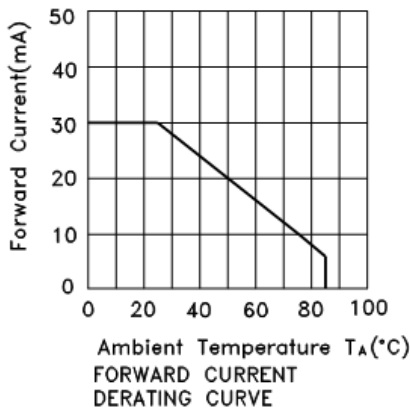
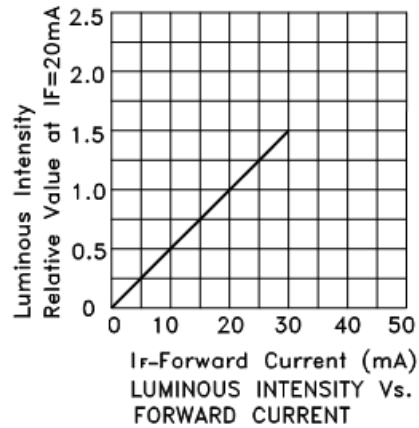
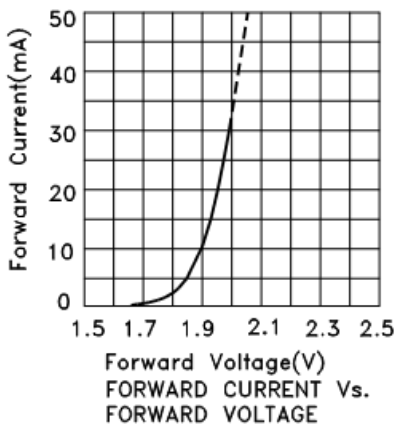
Parameter	RED	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	80	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.



UR



注意事项 Cautions

(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.

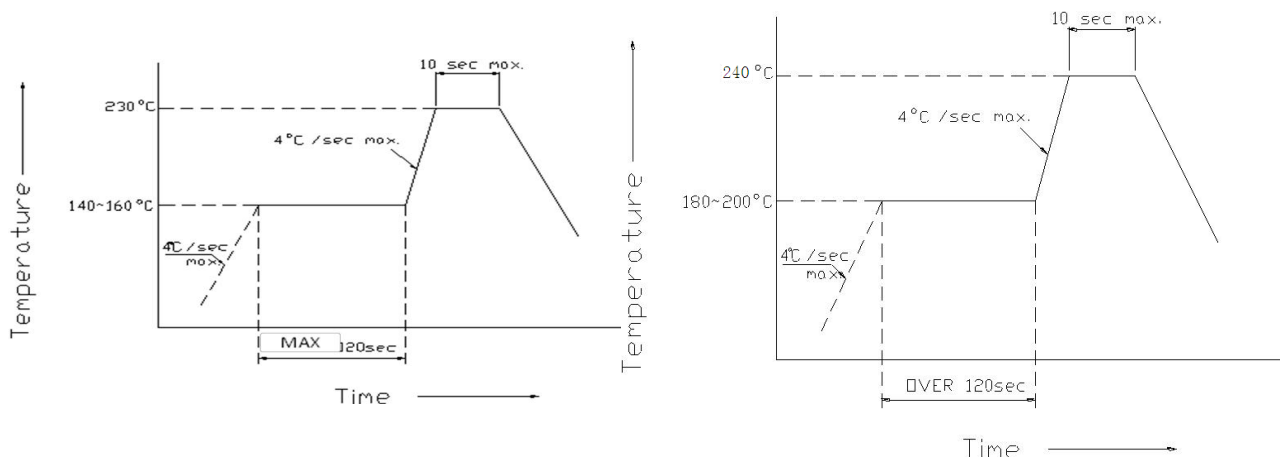
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and Second soldering process.

推荐焊接条件(Recommended soldering conditions)

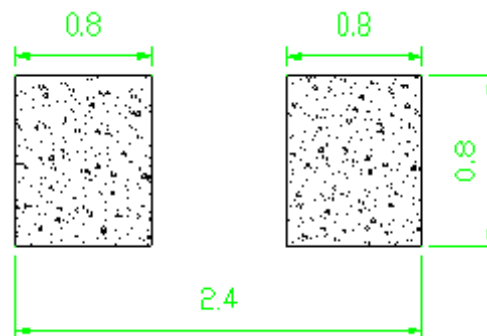
回流焊接 Reflow Soldering		手工焊接	
预热温度 Pre-heat	有铅 Lead Solder	无铅 Lead-free Solder	温度 Temperature
预热时间 Pre-heat time	140 ~ 160° C 120 sec. Max.	180 ~ 200° C 120 sec. Max.	焊接时间 Soldering time
峰值温度 Peak temperature	230° C Max. 10 sec. Max.	240° C Max. 10 sec. Max.	350° C Max. 3 sec. Max. (one time only)
焊接时间 Soldering time	参考下图	参考下图	
条件Condition			

有铅回焊 (Lead Solder)

无铅回焊 (Lead-Free Solder)



Recommended Soldering Pattern
 (Units : mm)



(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)使用注意事项

Cautions:

4.1.在开包装之前,请先检查包装袋有无漏气,如果有漏气现象,请退回我司重新烘烤除湿包装后再使用。

Please check if there is air leak before opening the package, if so, please return the goods back to take drying process for later using.

4.2 抽真空包装材料未超过 15 天可正常使用, 包装袋开启后,产品必须:

Products can be used within 15days after packaging, after that, they must be:

4.2.1 在 24hrs 内未焊接完毕。

Soldered within 24 hrs

4.2.2 要在规定环境条件中使用: 温度: 30°C 以内 湿度: $60\%RH$ 以下

Used in the condition: 30°C within and $60\%RH$ below

4.2.3 存储低于 $30\%RH$ 。

Stored in $30\%RH$ for moisture below.

4.3.抽真空包装材料超过 15 天(含)以上未使用,再使用时需重新拆铝箔袋取出烘烤 $85^{\circ}\text{C}/6\text{H}$ 除湿后才可使用。

Products cannot be used for and over 15days after being packaged unless opening the package and take drying our process in $85^{\circ}\text{C}/6\text{H}$.

4.4.抽真空包装材料超过 60 天(含)以上未使用,请退回我司重新烘烤除湿包装后再使用。

Products not be used for or over 60days after being packaged please return back to take drying out and packaging process for forward using.

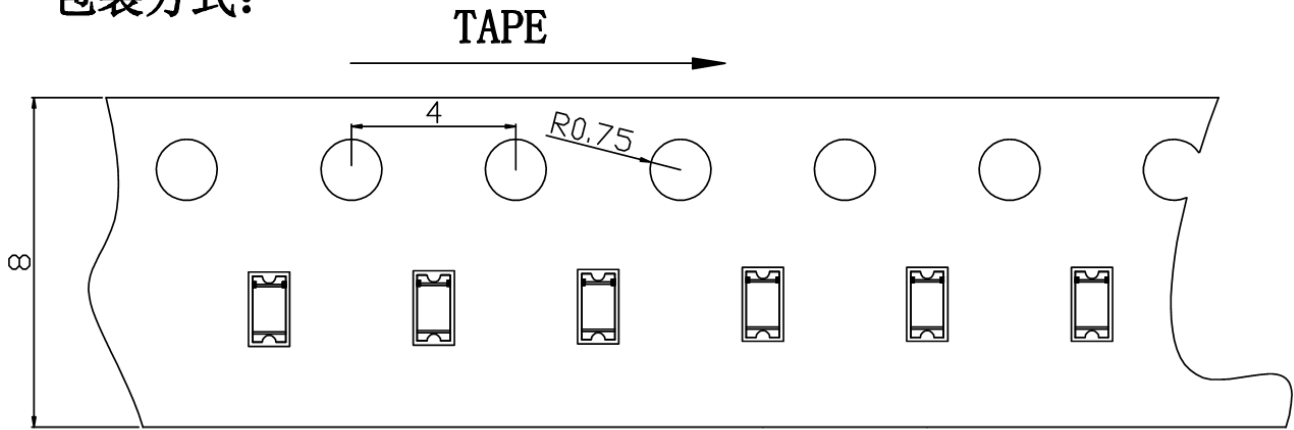
4.5.材料拆装后使用时间超过 24H 未用完,需烘烤 $85^{\circ}\text{C}/6\text{H}$ 除湿后才可使用。

Products not be used after opening the package need to be dried out for $85^{\circ}\text{C}/6\text{H}$

包装 PACKAGING

LEDS 在装带之后纸箱包装. The LEDs are packed in cardboard boxes after taping.

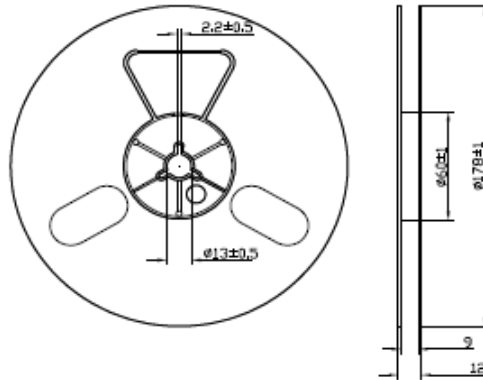
包装方式:



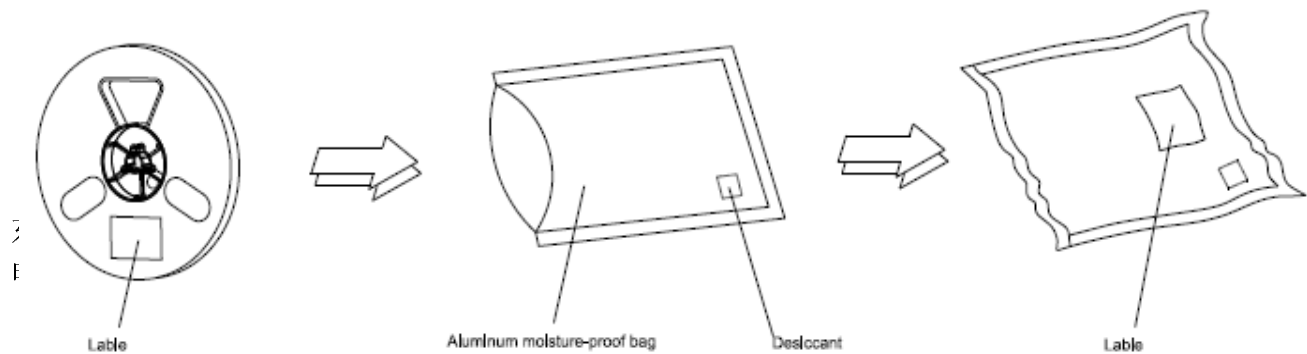
Package: 4000 pcs/reel

Reel Dimensions

卷轴尺寸



Moisture Resistant Packaging 防潮带包装



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$, Unit: mm 注: 标注公差为 $\pm 0.1\text{MM}$, 单位: MM