

PRELIMINARY SPEC

Part Number: KPTD-1608SYC-J3

Super Bright Yellow

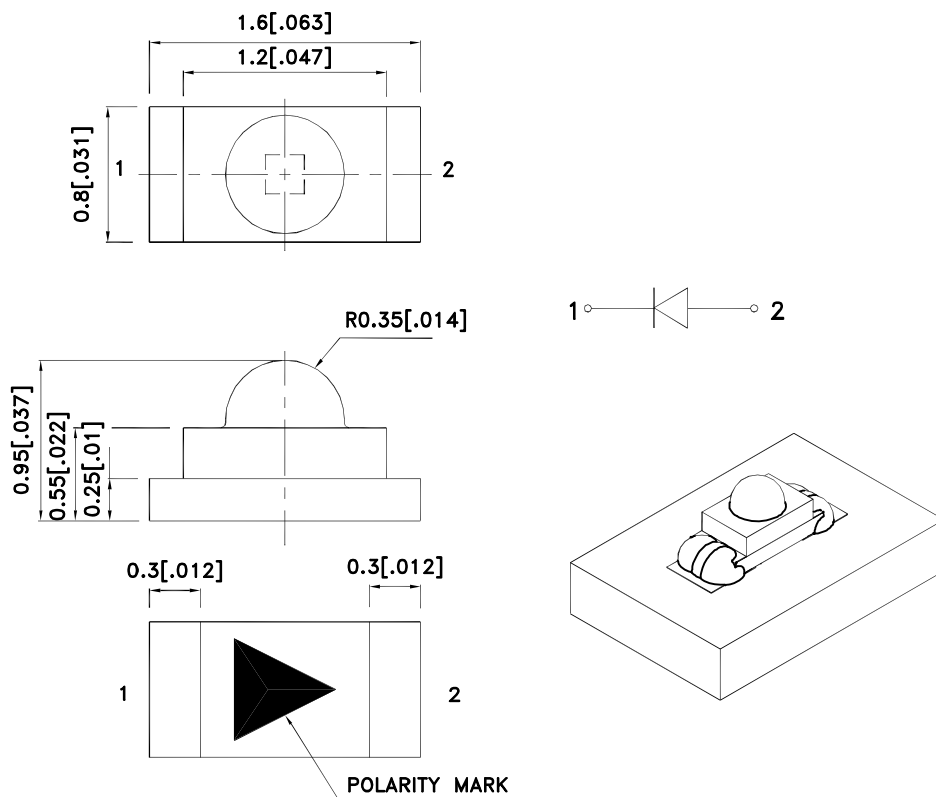
### Features

- 1.6mmX0.8mm SMT LED, 0.95mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel .
- Moisture sensitivity level : level 3.
- RoHS compliant.

### Description

The Super Bright Yellow device is based on light emitting diode chip made from AlGaInP.

### Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.15$  (0.006") unless otherwise noted.
3. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
KPTD-1608SYC-J3	Super Bright Yellow (AlGaInP)	WATER CLEAR	480	800	60°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{\text{peak}}$	Peak Wavelength	Super Bright Yellow	590		nm	I <sub>F</sub> =20mA
$\lambda_D$ [1]	Dominant Wavelength	Super Bright Yellow	589		nm	I <sub>F</sub> =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Yellow	20		nm	I <sub>F</sub> =20mA
C	Capacitance	Super Bright Yellow	45		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub> [2]	Forward Voltage	Super Bright Yellow	2	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Super Bright Yellow		10	uA	V <sub>R</sub> =5V

Notes:

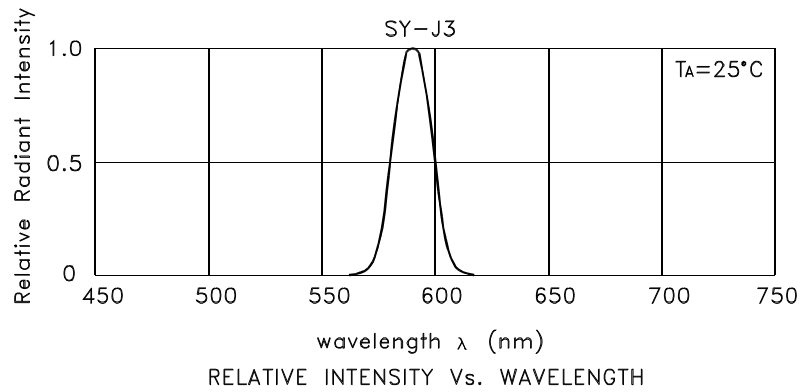
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

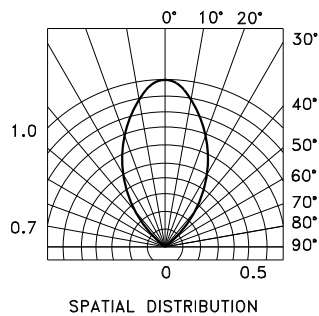
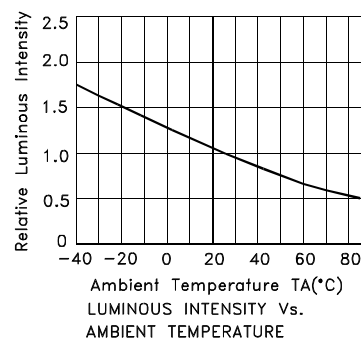
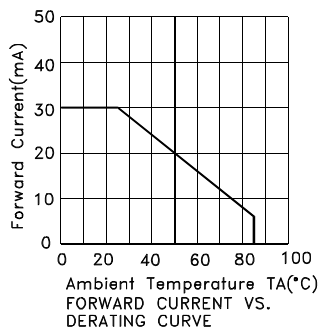
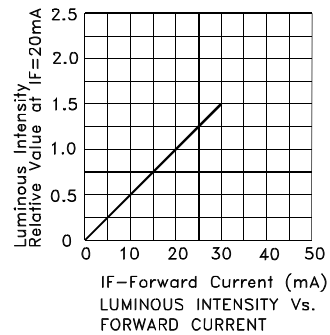
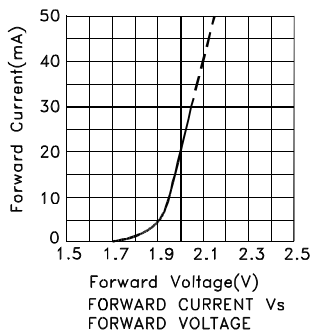
Parameter	Super Bright Yellow	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

Note:

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



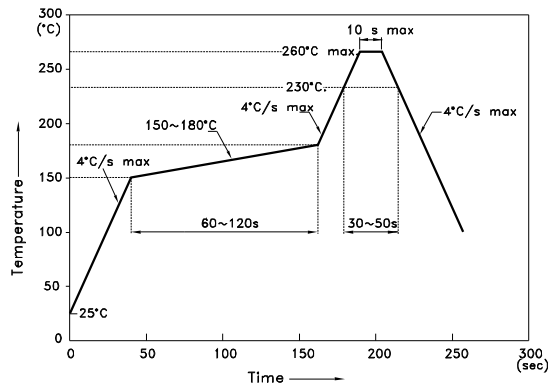
## Super Bright Yellow KPTD-1608SYC-J3



## KPTD-1608SYC-J3

Reflow soldering is recommended and the soldering profile is shown below.  
Other soldering methods are not recommended as they might cause damage to the product.

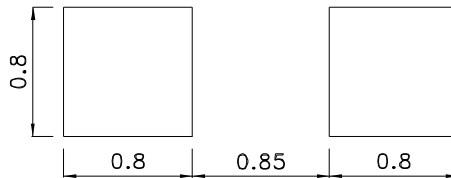
Reflow Soldering Profile For Lead-free SMT Process.



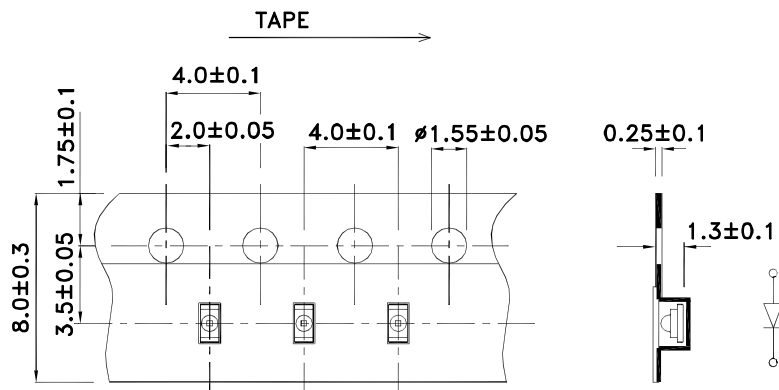
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

### Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



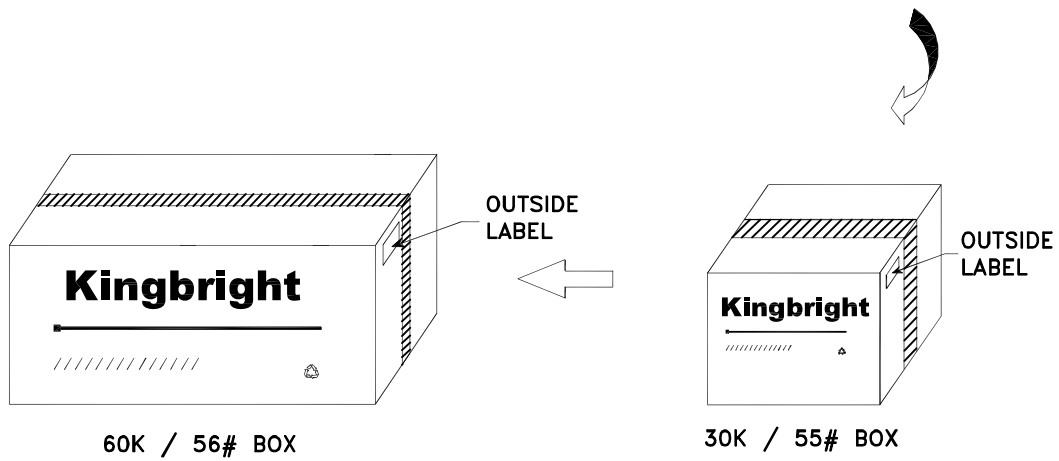
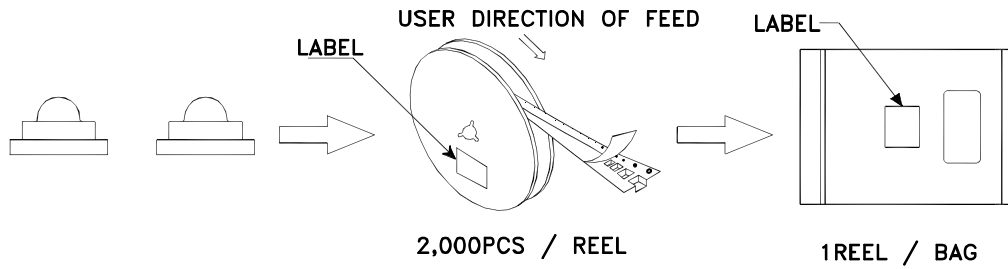
### Tape Dimensions (Units : mm)



# Kingbright

PACKING & LABEL SPECIFICATIONS

KPTD-1608SYC-J3



<h2 style="margin: 0;">Kingbright</h2>	
P/N0: KPTD-1608xxx	
QTY: 2,000 pcs	Q.C.
S/N: XXXX	<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">             Q C              xx xx xxxx              PASSED           </div>
CODE: XXX	
LOT NO:	
<small>XXXXXXXXXXXXXXXXXXXXXXXXXXXX</small>	
RoHS Compliant	