

1.6X0.8mm SMD CHIP LED LAMP

Part Number: KPT-1608LVSYCK-J3-PRV

Super Bright Yellow

Features

- 1.6mmX0.8mm SMD LED, 0.75mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel .
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- RoHS compliant.

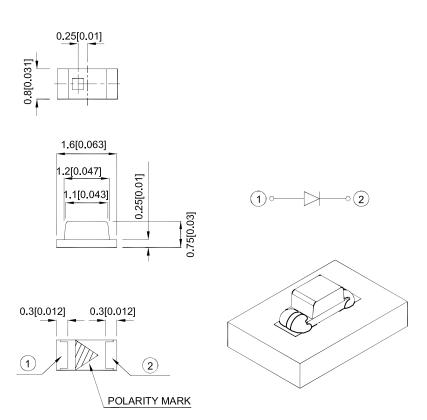
Description

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

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Package Dimensions



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1 (0.004")$ unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
 The device has a single mounting surface. The device must be mounted according to the specifications.

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Selection Guide

Part No.	Emitting Color (Material)	Lens Type	lv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Тур.	201/2
KPT-1608LVSYCK-J3-PRV	Super Bright Yellow (AlGalnP)	Water Clear	15	25	120°

- 1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
 Luminous intensity / luminous Flux: +/-15%.
 Luminous intensity value is traceable to CIE127-2007 standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	590		nm	IF=2mA
λD [1]	Dominant Wavelength	Super Bright Yellow	590		nm	IF=2mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	20		nm	IF=2mA
С	Capacitance	Super Bright Yellow	45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Yellow	1.85	2.1	V	IF=2mA
lr	Reverse Current	Super Bright Yellow		10	uA	V _R =5V

- Notes:
 1. Wavelength: +/-1nm.
 2. Forward Voltage: +/-0.1V.
 3. Wavelength value is traceable to CIE127-2007 standards.
- 4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

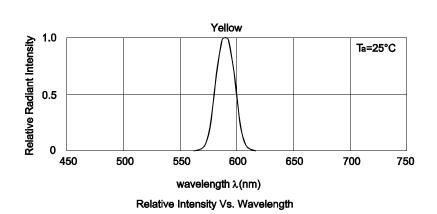
Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units		
Power dissipation	63	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			

- 1.1/10 Duty Cycle, 0.1ms Pulse Width.
 Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity Ref JEDEC/JESD625-A and JEDEC/J-STD-033.

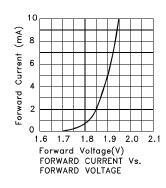
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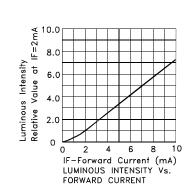
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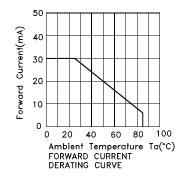


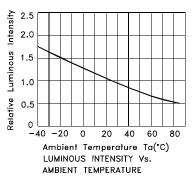
Super Bright Yellow

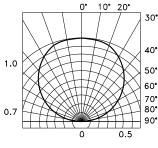
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SPATIAL DISTRIBUTION

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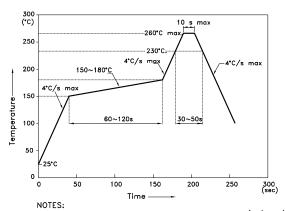
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

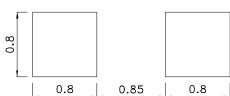
Reflow Soldering Profile For Lead-free SMT Process.

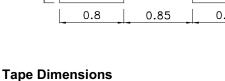


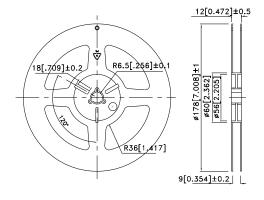
- 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

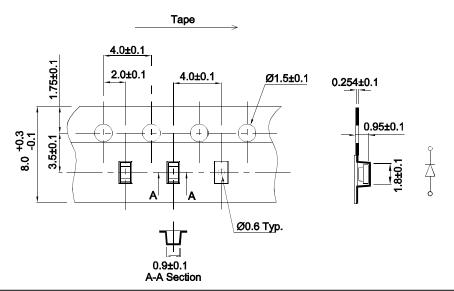
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

Reel Dimension









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(Units: mm)

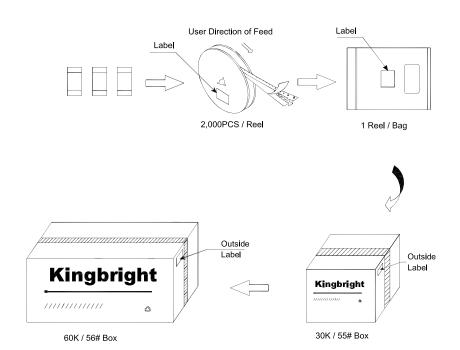
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PACKING & LABEL SPECIFICATIONS

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