

## 1.6X0.8mm SMD CHIP LED LAMP

Part Number: KPT-1608LVSECK-J4-PRV

Super Bright Orange

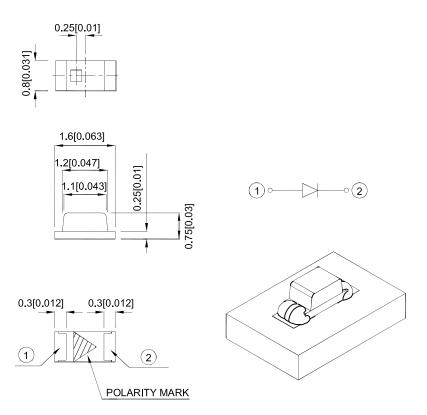
### **Features**

- 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 Orange source color devices are made with AlGaInP Light Emitting Diode.

## **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-1608LVSECK-J4-PRV	Super Bright Orange (AlGaInP)	Water Clear	80	150	120°
			*30	*50	

### Notes:

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

  \* 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 Orange	611		nm	IF=2mA
λD [1]	Dominant Wavelength	Super Bright Orange	605		nm	IF=2mA
Δλ1/2	Spectral Line Half-width	Super Bright Orange	17		nm	IF=2mA
С	Capacitance	Super Bright Orange	27		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Orange	1.8	2.1	V	IF=2mA
lR	Reverse Current	Super Bright Orange		10	uA	V <sub>R</sub> =5V

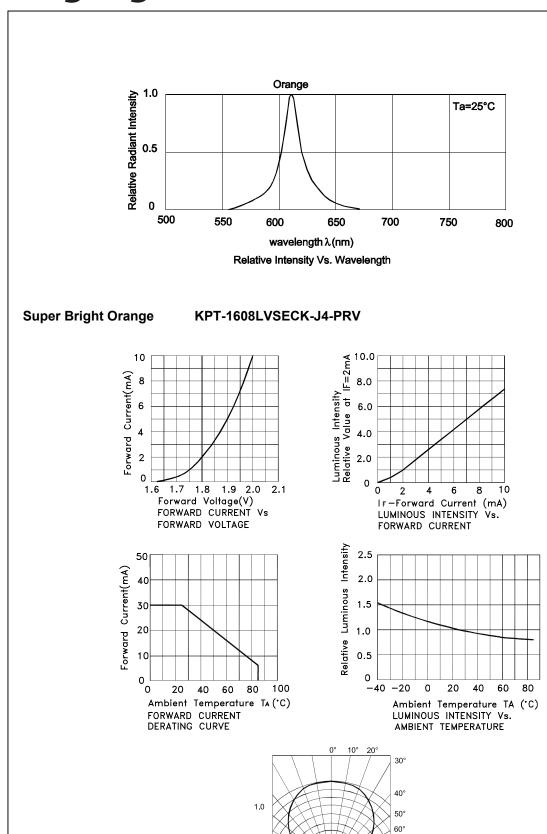
- Notes:
  1. Wavelength: +/-1nm.
  2. Forward Voltage: +/-0.1V.
  3. Wavelength value is traceable to CIE127-2007 standards.
- Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

## Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units		
Power dissipation	63	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	150	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C	-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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SPATIAL DISTRIBUTION

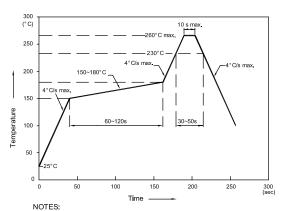
70° 80°

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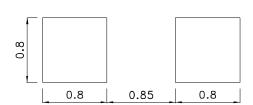
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

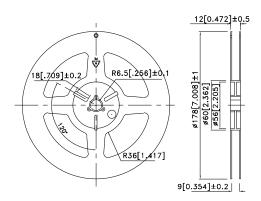


- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it is exposed
- to high temperature.
  3.Number of reflow process shall be 2 times or less.

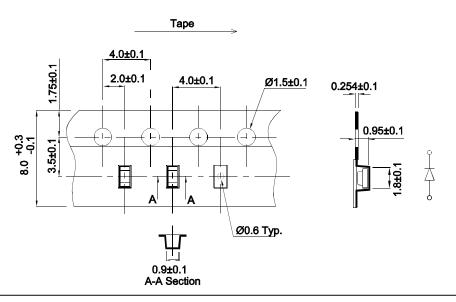
## Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



## **Reel Dimension**



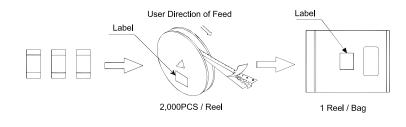
Tape Dimensions (Units : mm)

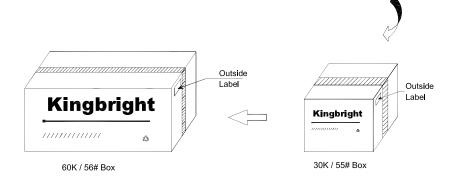


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## **PACKING & LABEL SPECIFICATIONS**

## KPT-1608LVSECK-J4-PRV







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