

#### 1.6X0.8mm SMD CHIP LED LAMP

Part Number: KPT-1608YC Yellow

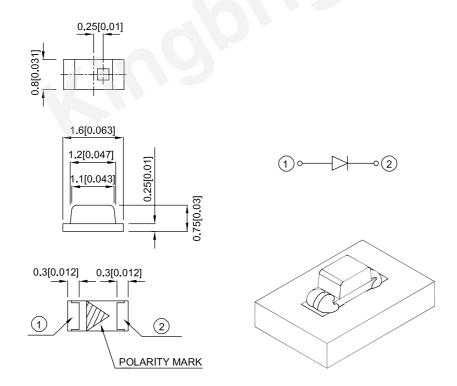
#### **Features**

- 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.
- RoHS compliant.

#### **Description**

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

### **Package Dimensions**



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±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] @ 20mA		Viewing Angle [1]
		,	Min.	Тур.	201/2
YPT-1608YC Yellow (GaAsP/GaP)		Water Clear	3	8	150°

- 1.  $\theta$ 1 / 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

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Symbol	Parameter	Emitting Color	Тур.	Max.	Units	Test Conditions		
λpeak	Peak Wavelength	Yellow	590		nm	IF=20mA		
λD [1]	Dominant Wavelength	Yellow	588		nm	IF=20mA		
Δλ1/2	Spectral Line Half-width	Yellow	35		nm	IF=20mA		
С	Capacitance	Yellow	20		pF	VF=0V;f=1MHz		
VF [2]	Forward Voltage	Yellow	2.1	2.5	V	IF=20mA		
lr	Reverse Current	Yellow		10	uA	VR=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

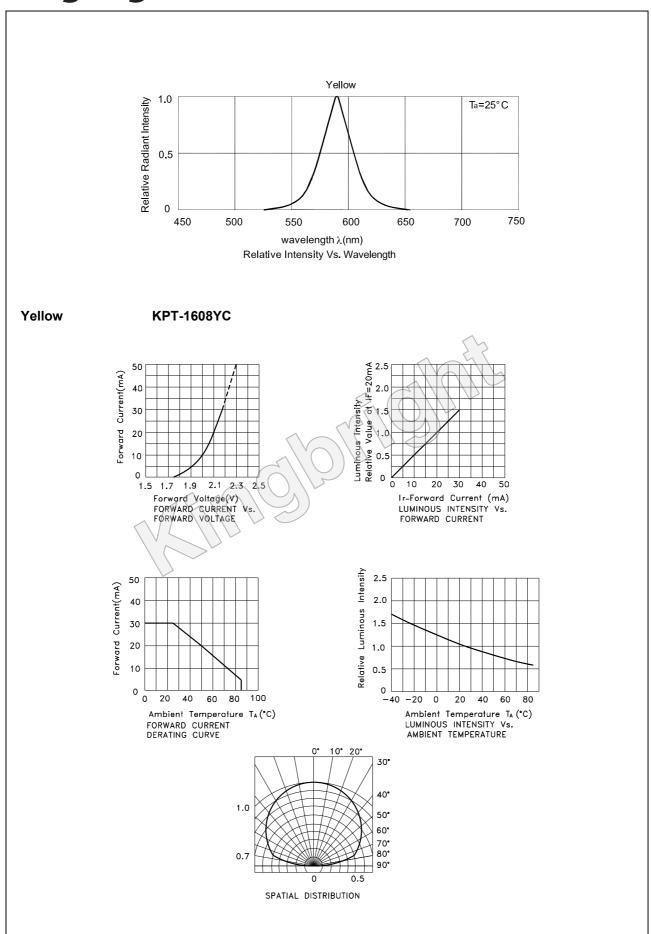
Parameter	Values	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	140	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

#### Notes:

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 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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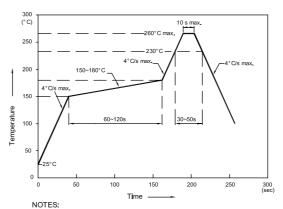
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#### **KPT-1608YC**

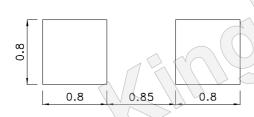
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



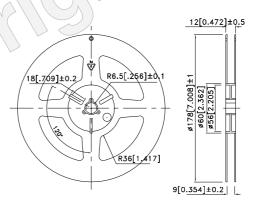
- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it is exposed to high temperature
- to high temperature.
  3.Number of reflow process shall be 2 times or less.

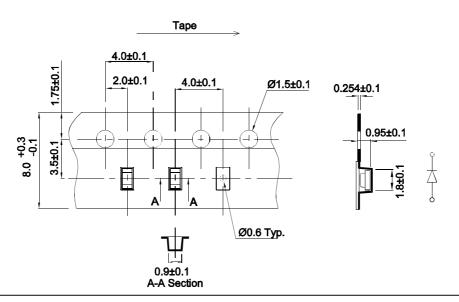
## Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



## Tape Dimensions (Units: mm)

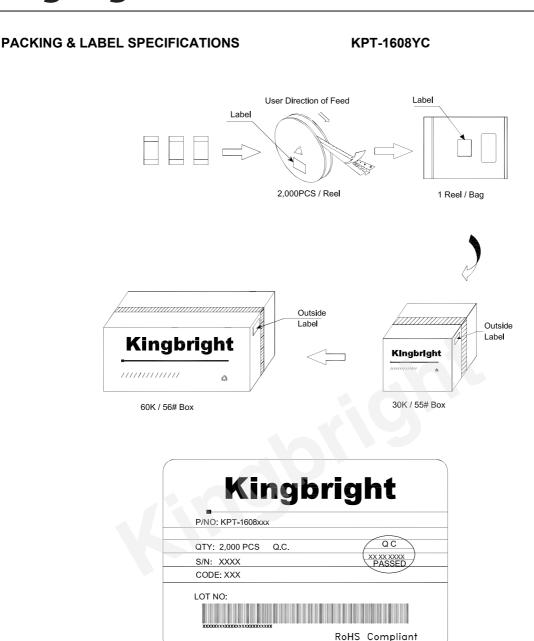
#### Reel Dimension





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