

## 0.65X0.35mm SMD CHIP LED LAMP (0.2mm Height)

Part Number: KPG-0603SYC-TT

Super Bright Yellow

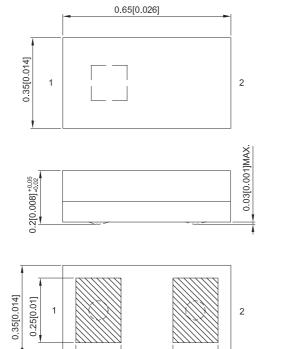
#### **Features**

- 0.65mmX0.35mm SMT LED,0.2mm thickness.
- Low power consumption.
- Wide viewing angle.
- Compatible with automatic placement equipment.
- Package:4000pcs/reel.
- Moisture sensitivity level : level 2.
- RoHS compliant.

### Description

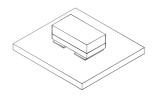
The Super Bright Yellow source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

## **Package Dimensions**









- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.1(0.004") unless otherwise noted.
- 3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

  4. The device has a single mounting surface. The device must be mounted according to the specifications.

0.2[0.008] 0.55[0.022]

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### **Selection Guide**

Part No.	Part No. Dice Lens		lv (mcd) [2] @ 10mA		Viewing Angle [1]
		, ,	Min.	Тур.	201/2
KPG-0603SYC-TT	Super Bright Yellow (AlGaInP)	Water Clear	10	30	135°

- 1.01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- 2.Luminous intensity/ luminous Flux: +/-15%
- 3.Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

# Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow	591		nm	IF=10mA
λD [1]	Dominant Wavelength	Super Bright Yellow	589		nm	IF=10mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow	15		nm	IF=10mA
VF [2]	Forward Voltage	Super Bright Yellow	2	2.4	V	IF=10mA
lr	Reverse Current	Super Bright Yellow		10	uA	V <sub>R</sub> =5V

- 1.Wavelength: +/-1nm.
- 2.Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

  4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

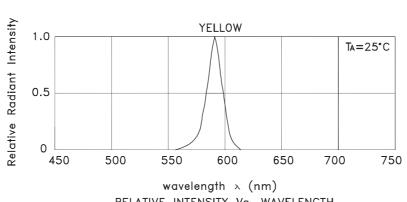
# Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Yellow	Units		
Power dissipation	48	mW		
DC Forward Current	20	mA		
Peak Forward Current [1]	100	mA		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +85°C			
Storage Temperature	-40°C To +85°C			

### Note:

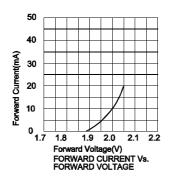
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

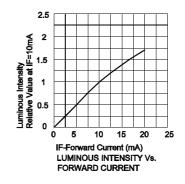
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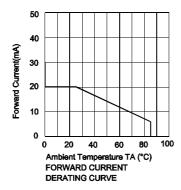


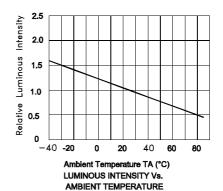
RELATIVE INTENSITY Vs. WAVELENGTH

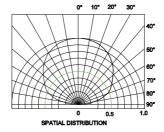
**Super Bright Yellow** KPG-0603SYC-TT









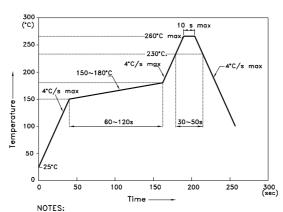


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### KPG-0603SYC-TT

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.

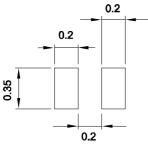
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

3. Number of reflow process shall be 2 times or less.

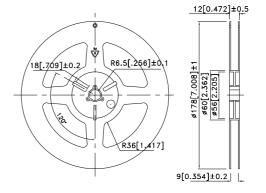
# Recommended Soldering Pattern

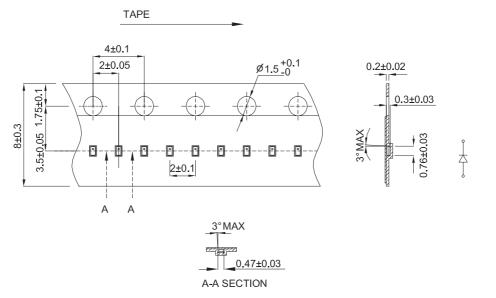
(Units : mm; Tolerance: ± 0.1)

## **Reel Dimension**



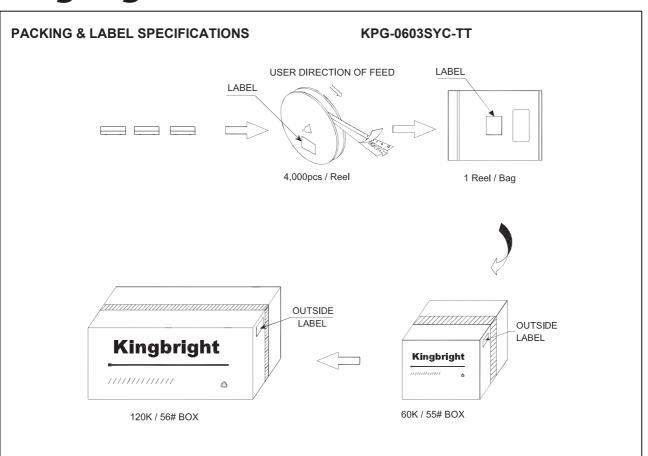






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