

PRELIMINARY SPEC

Part Number: KPG-1608SYKC-T

Super Bright Yellow

### Features

- 1.6mmX0.8mm SMT LED, 0.25mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- COMPATIBLE WITH AUTOMATIC PLACEMENT EQUIPMENT
- IDEAL FOR BACKLIGHT AND INDICATOR.
- PACKAGE: 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

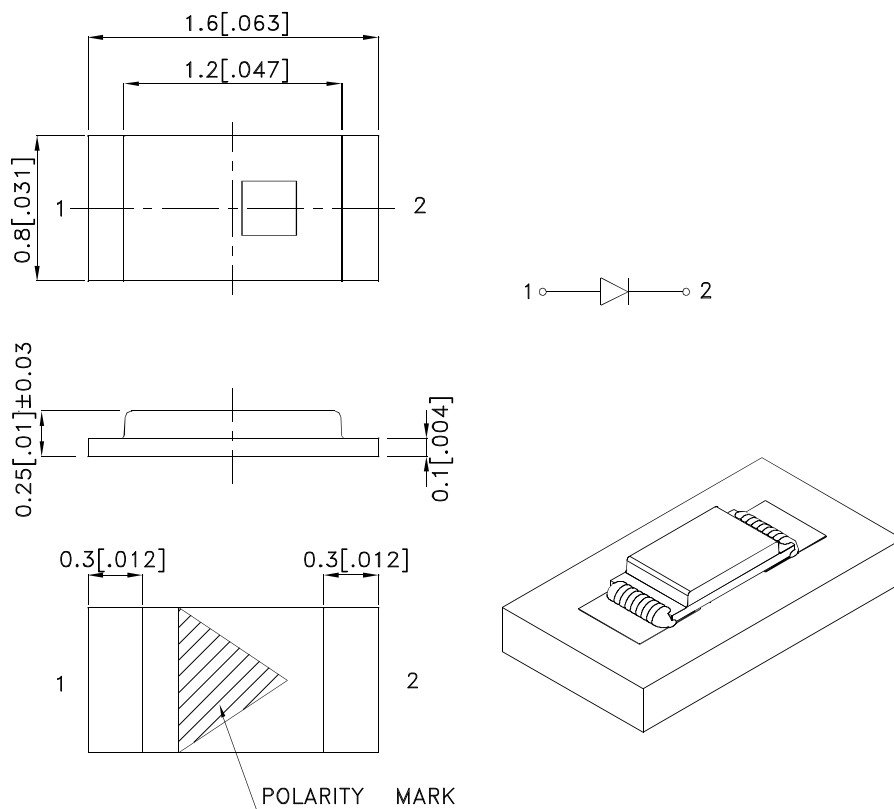
### Description

The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

### Applications

Mobile phone Keypad indicator and backlight  
Flat backlight for LCD, switch and symbol  
Toys

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1$  (0.004") 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
KPG-1608SYKC-T	Super Bright Yellow (AlGaInP)	WATER CLEAR	70	100	120°

Notes:

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

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

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Super Bright Yellow	591		nm	I <sub>F</sub> =20mA
λ <sub>D</sub> [1]	Dominant Wavelength	Super Bright Yellow	589		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	Super Bright Yellow	15		nm	I <sub>F</sub> =20mA
C	Capacitance	Super Bright Yellow	25		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub> [2]	Forward Voltage	Super Bright Yellow	2.05	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:

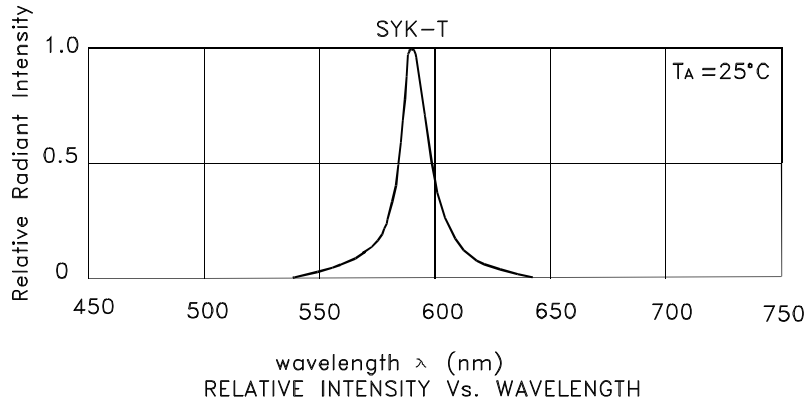
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

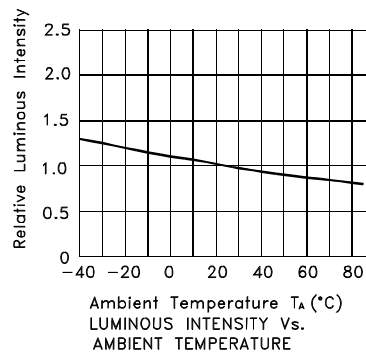
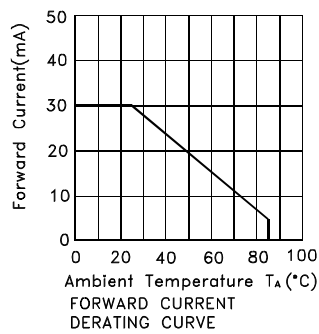
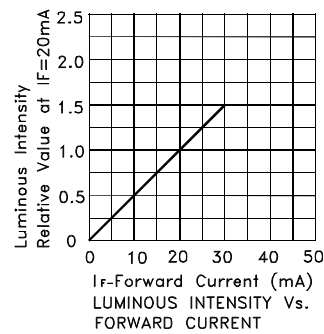
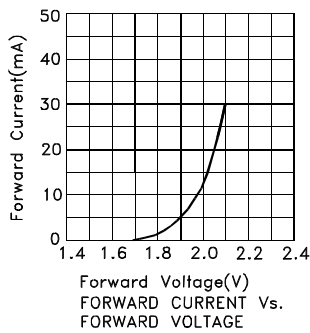
Parameter	Super Bright Yellow	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

Note:

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



## Super Bright Yellow KPG-1608SYKC-T



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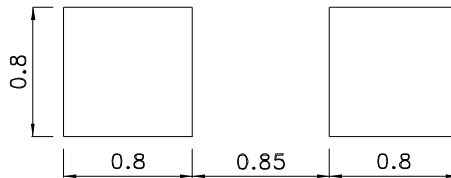
Reflow Soldering Profile For Lead-free SMT Process.



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 Specifications (Units : mm)

