

1.6x0.8x0.5mm BI-COLOR SURFACE MOUNT **LED**

Part Number: KPHB-1608CGKSYKC-GX

Green

Super Bright Yellow

Features

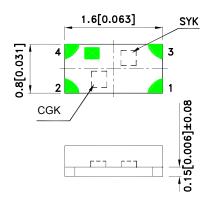
- 1.6mmX0.8mm SMT LED, 0.5mm thickness.
- Compatible with reflow soldering.
- Available in various color combination.
- Package: 2000pcs / reel .
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

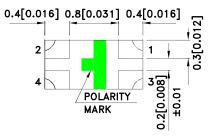
Description

The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

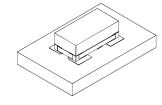
The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

Package Dimensions









- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.15(0.006") 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.



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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
KPHB-1608CGKSYKC-GX	Green (AlGaInP)	Water Clear	20	50	130°
	Super Bright Yellow (AlGaInP)	Water Clear	80	150	

- 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 the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions	
λpeak	Peak Wavelength	Green Super Bright Yellow	574 590		nm	Ir=20mA	
λD [1]	Dominant Wavelength	Green Super Bright Yellow	570 590		nm	nm IF=20mA	
Δλ1/2	Spectral Line Half-width	Green Super Bright Yellow	20 20		nm	I==20mA	
С	Capacitance	Green Super Bright Yellow	15 20		pF	VF=0V;f=1MHz	
VF [2]	Forward Voltage	Green Super Bright Yellow	2.1 2	2.5 2.5	V	IF=20mA	
lR	Reverse Current	Green Super Bright Yellow		10 10	uA	V _R = 5V	

Notes:

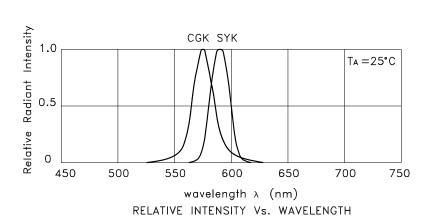
- 1.Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.
 Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

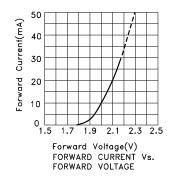
Parameter	Green	Super Bright Yellow	Units		
Power dissipation	75	75	mW		
DC Forward Current	30	30	mA		
Peak Forward Current [1]	150	175	mA		
Reverse Voltage	5 V				
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +85°C				

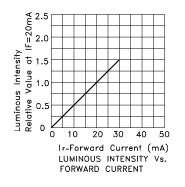
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

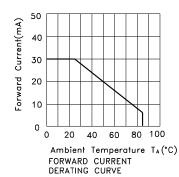
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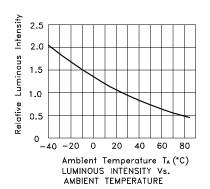


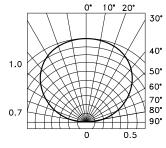
KPHB-1608CGKSYKC-GX Green







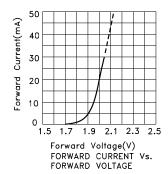


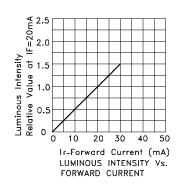


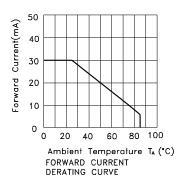
SPATIAL DISTRIBUTION

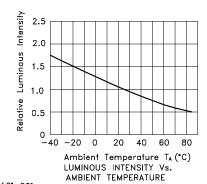
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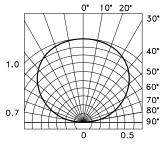
Super Bright Yellow











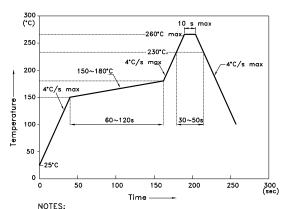
SPATIAL DISTRIBUTION

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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.



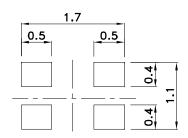
- NOTES:

 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.

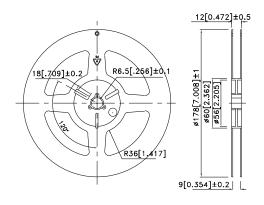
 3.Number of reflow process shall be 2 times or less.

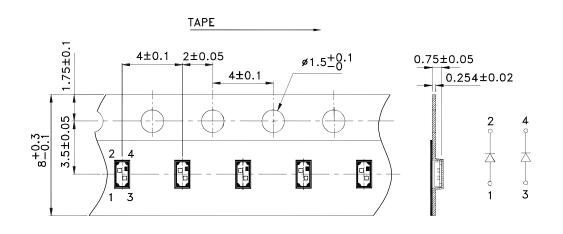
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



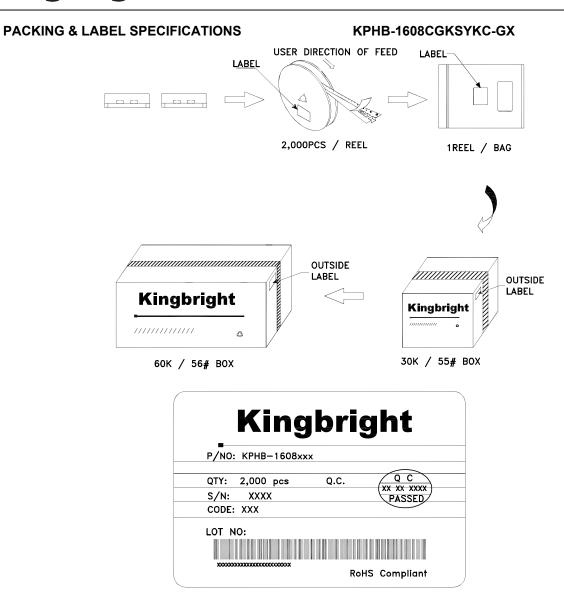
Tape Dimensions (Units: mm)

Reel Dimension





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