



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

Part Number: APHB1608ZGSYKC

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 InGaN on Sapphire Light Emitting Diode.

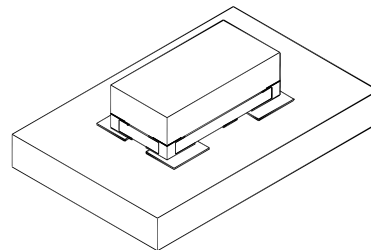
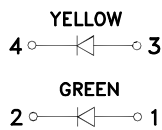
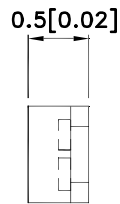
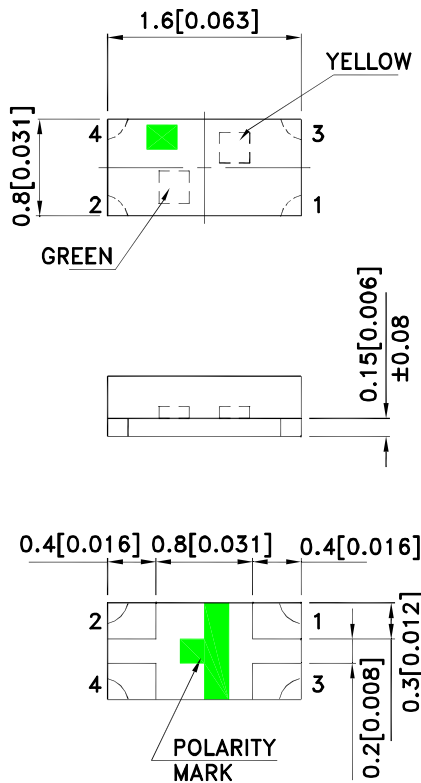
The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

Static electricity and surge damage the LEDs.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.15(0.006)$  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.



## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APHB1608ZGSYKC	Green (InGaN)	Water Clear	200	350	130°
	Super Bright Yellow (AlGaInP)		80	150	

Notes:

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

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

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Green Super Bright Yellow	515 590		nm	I <sub>F</sub> =20mA
$\lambda_D$ [1]	Dominant Wavelength	Green Super Bright Yellow	525 590		nm	I <sub>F</sub> =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Green Super Bright Yellow	30 20		nm	I <sub>F</sub> =20mA
C	Capacitance	Green Super Bright Yellow	45 20		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub> [2]	Forward Voltage	Green Super Bright Yellow	3.3 2	4.1 2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Green Super Bright Yellow		50 10	uA	V <sub>R</sub> = 5V

Notes:

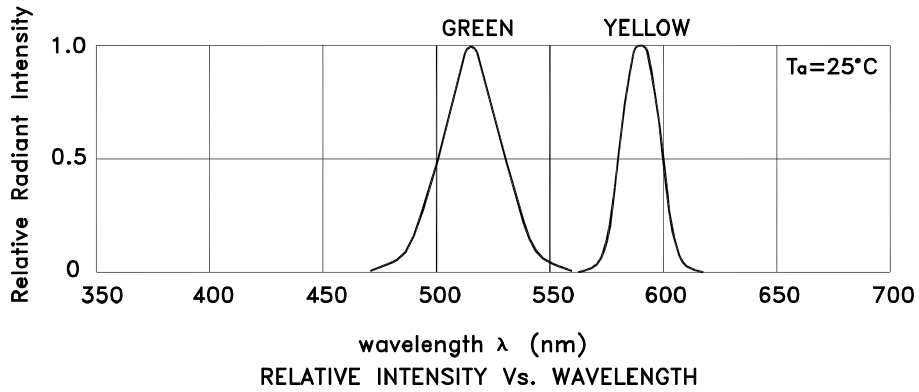
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

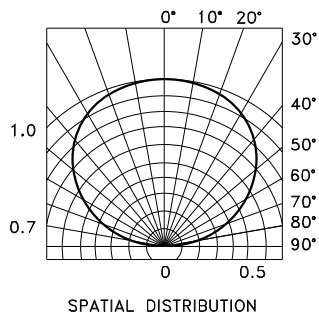
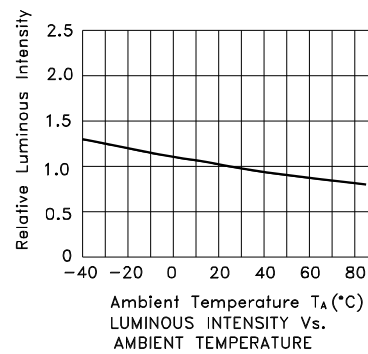
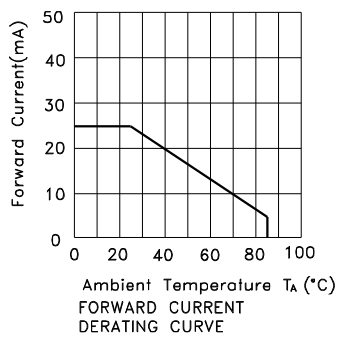
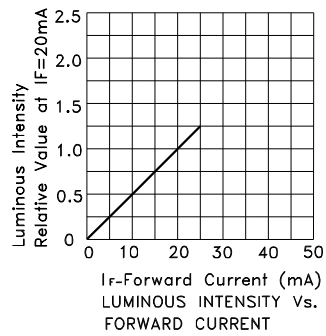
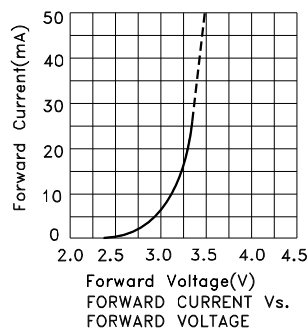
Parameter	Green	Super Bright Yellow	Units
Power dissipation	102.5	75	mW
DC Forward Current	25	30	mA
Peak Forward Current [1]	150	175	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

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

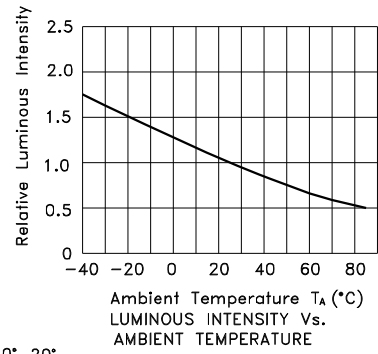
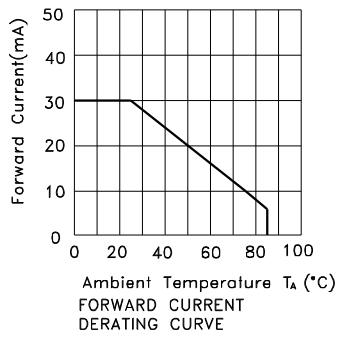
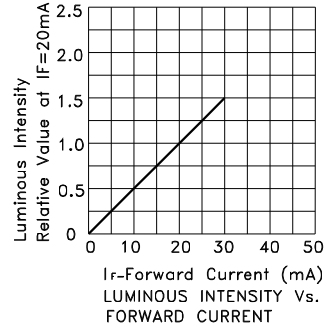
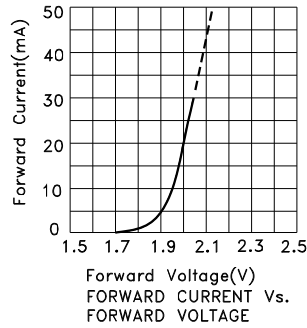


## APHB1608ZGSYKC Green



# Kingbright

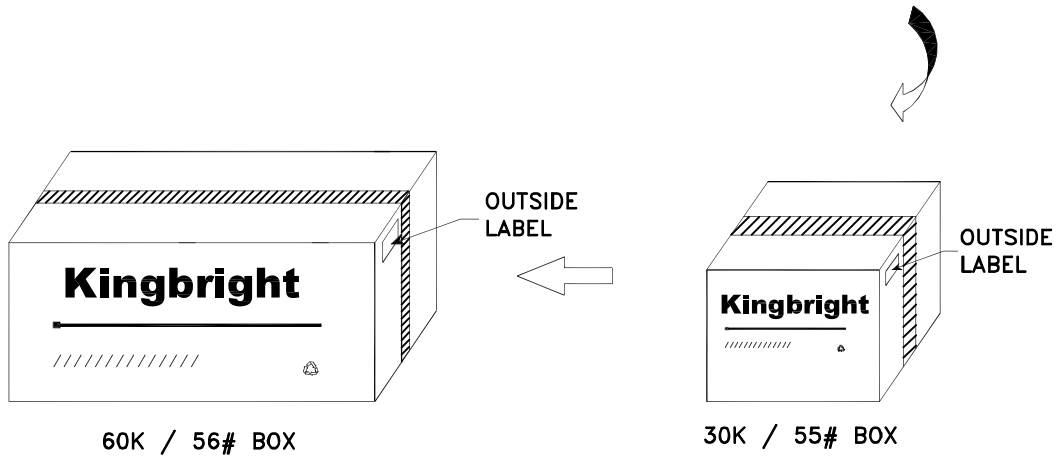
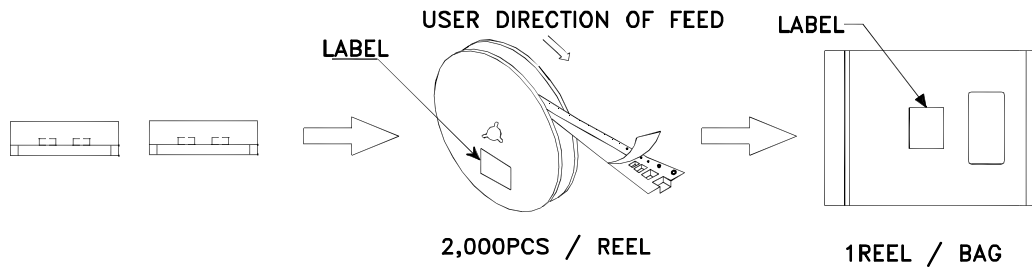
## Super Bright Yellow





**PACKING & LABEL SPECIFICATIONS**

**APHB1608ZGSYKC**



<h1 style="margin: 0;">Kingbright</h1>		
P/NO: APHB1608xxx		
QTY: 2,000 pcs	Q.C.	<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">                 Q C                  XX XX XXXX                  PASSED             </div>
S/N: XXXX		
CODE: XXX		
LOT NO:		
 xxxxxxxxxxxxxxxxxxxxxxxxxxxx		
RoHS Compliant		