

ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

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.

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

Part Number: APHB1608QBDSYKC

Blue Super Bright Yellow

Description

The Blue source color devices are made with InGaN Light Emitting Diode.

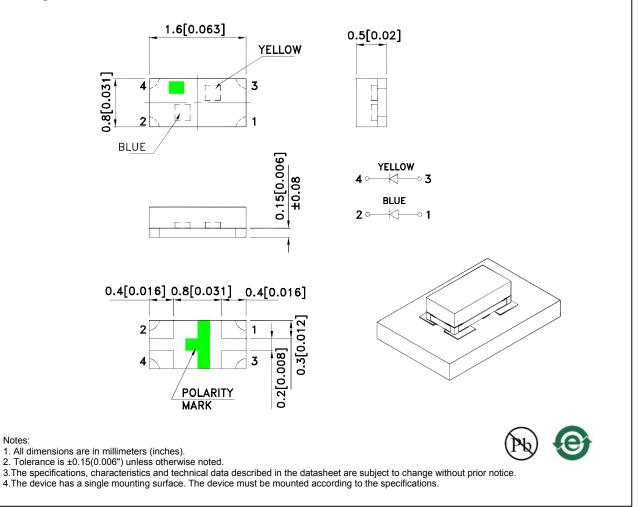
The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.

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



SPEC NO: DSAK7905 APPROVED: WYNEC REV NO: V.2 CHECKED: Allen Liu DATE: APR/19/2011 DRAWN: J.Yu PAGE: 1 OF 6 ERP: 1203011318

Selection Guide lv (mcd) [2] Viewing @ 20mA Angle [1] Part No. Dice Lens Type Min. 201/2 Тур. Blue (InGaN) 50 70 APHB1608QBDSYKC Water Clear 130° Super Bright Yellow (AlGaInP) 80 150

Notes:

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%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue Super Bright Yellow	468 590		nm	I⊧=20mA
λD [1]	Dominant Wavelength	Blue Super Bright Yellow	470 590		nm	I⊧=20mA
Δλ1/2	Spectral Line Half-width	Blue Super Bright Yellow	25 20		nm	I⊧=20mA
С	Capacitance	Blue Super Bright Yellow	100 20		pF	VF=0V;f=1MHz
Vf [2]	Forward Voltage	Blue Super Bright Yellow	3.3 2	4 2.5	V	I⊧=20mA
lr	Reverse Current	Blue Super Bright Yellow		50 10	uA	VR = 5V

Notes:

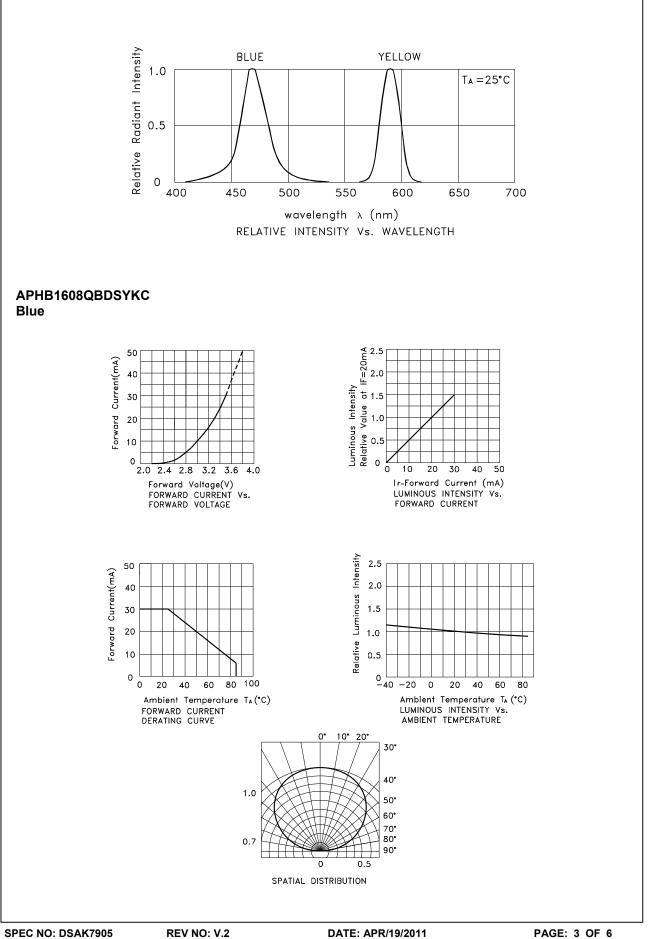
1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

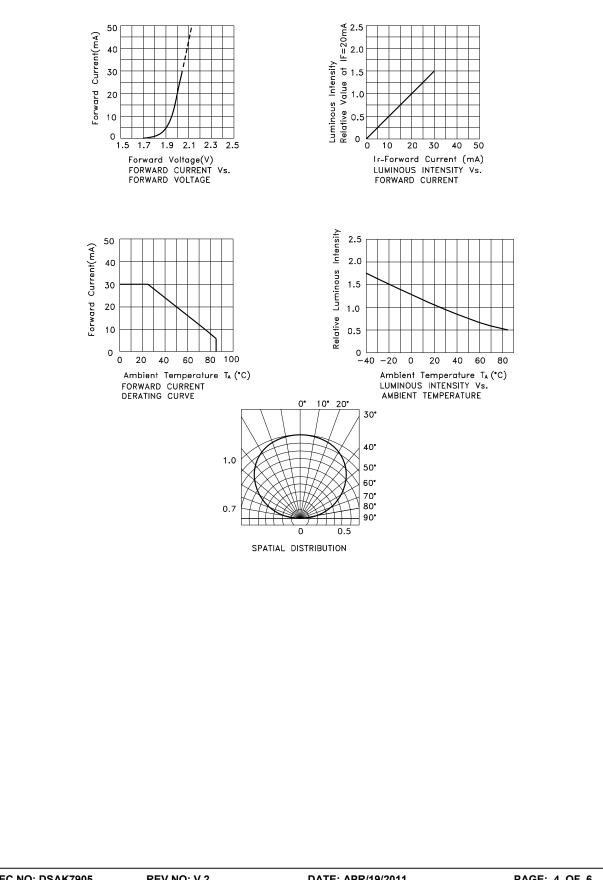
Parameter	Blue	Blue Super Bright Yellow			
Power dissipation	120	75	mW		
DC Forward Current	30	30	mA		
Peak Forward Current [1]	150	175	mA		
Reverse Voltage		V			
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +85°C				

Note:

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



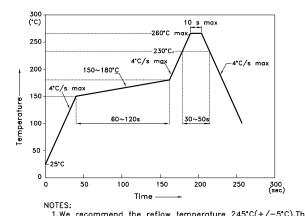
Super Bright Yellow



APHB1608QBDSYKC

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.

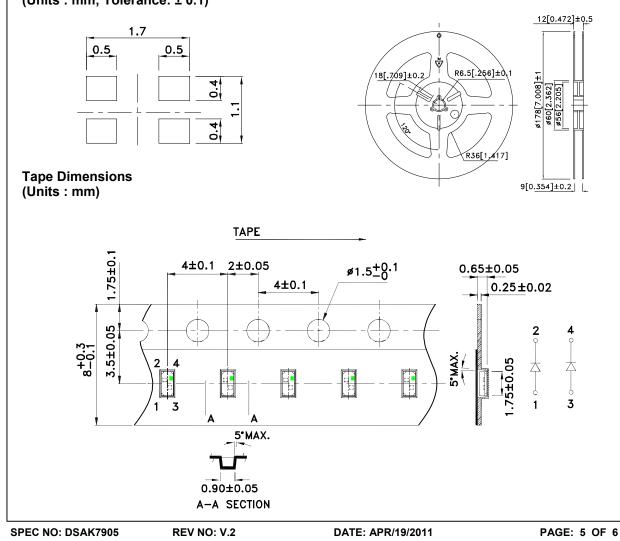


NOTES: 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature. 3.Number of reflow process shall be 2 times or less.



APPROVED: WYNEC

Reel Dimension



CHECKED: Allen Liu

DRAWN: J.Yu

