

1.6x1.5mm BI-COLOR SMD CHIP LED LAMP

Part Number: APTB1615SYKCGKC-F01

Super Bright Yellow Green

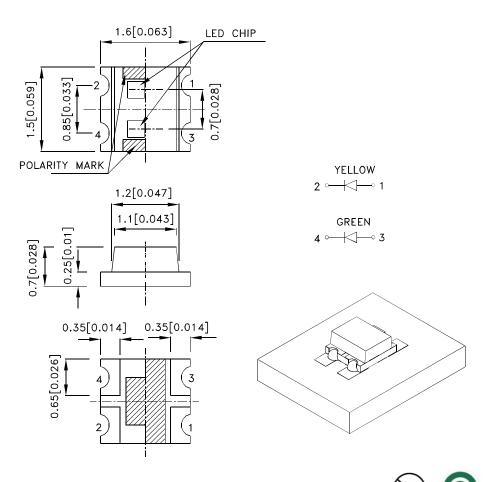
Features

- 1.6mmx1.5mm SMT LED, 0.7mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Descriptions

- The Super Bright Yellow device is made with AlGaInP (on GaAs substrate) light emitting diode chip.
- The Green 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 $\pm 0.2 (0.008")$ unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
 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
APTB1615SYKCGKC-F01	Super Bright Yellow (AlGaInP)	Water Clear	80	120	120°
	Green (AlGalnP)	Water Clear	20	50	

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%.
- 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 Green	590 574		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Yellow Green	590 570		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow Green	20 20		nm	I=20mA
С	Capacitance	Super Bright Yellow Green	20 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Yellow Green	2 2.1	2.5 2.5	V	I=20mA
lr	Reverse Current	Super Bright Yellow Green		10 10	uA	VR = 5V

Notes:

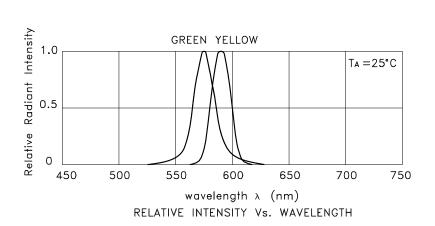
- 1.Wavelength: +/-1nm.
- 2.Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

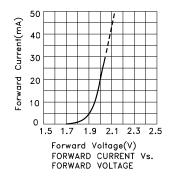
Parameter	Super Bright Yellow	Green	en Units			
Power dissipation	75	75	mW			
DC Forward Current	30	30	mA			
Peak Forward Current [1]	175	150	mA			
Reverse Voltage		V				
Operating Temperature	-40°C To +85°C					
Storage Temperature	-40°C To +85°C					

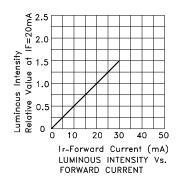
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

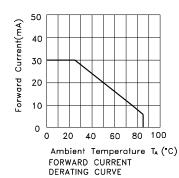
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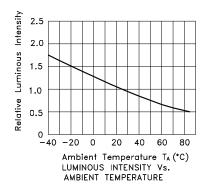


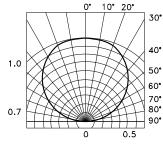
APTB1615SYKCGKC-F01 Super Bright Yellow









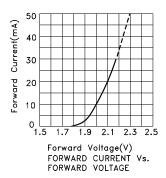


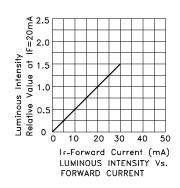
SPATIAL DISTRIBUTION

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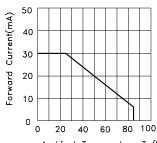
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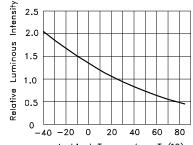
Green





2.5



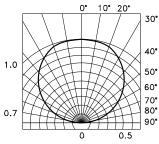




Ambient Temperature T_A (°C) LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

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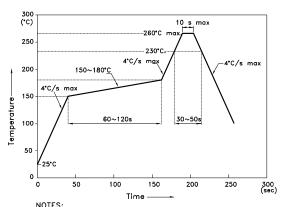
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



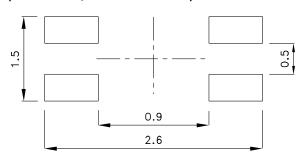
- NOTES:

 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.
- to high temperature.

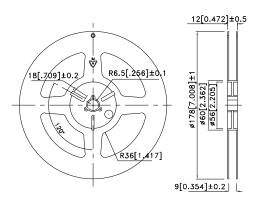
 3.Number of reflow process shall be 2 times or less.

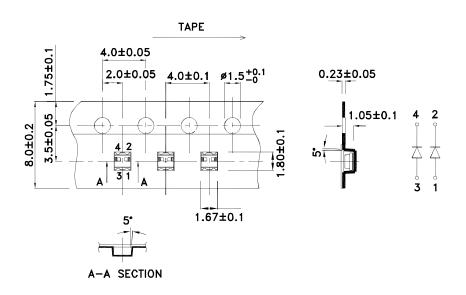
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Tape Dimensions (Units : mm)

Reel Dimension

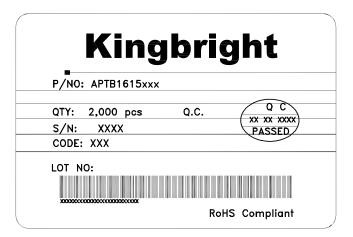




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PACKING & LABEL SPECIFICATIONS USER DIRECTION OF FEED LABEL 2,000pcs / Reel 1 Reel / Bag OUTSIDE LABEL Kingbright Kingbright



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