

1.6X1.25mm BI-COLOR SMD CHIP LED LAMP

Part Number: APTB1612SYKCGKC-F01

Super Bright Yellow Green

Features

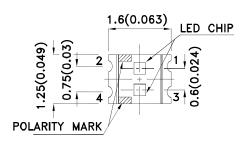
- 1.6mmx1.25mm SMT LED, 0.65mm thickness.
- Bi-color,low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

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

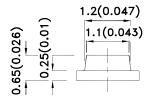
The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

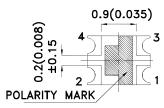
Package Dimensions

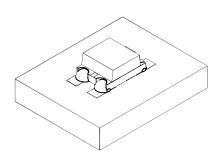












Notes:

- All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.2(0.008") 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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 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: J.Yu
 ERP: 1203002069

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,,	Min.	Тур.	201/2
APTB1612SYKCGKC-F01	Super Bright Yellow (AlGaInP)	Water Clear	80	120	120°
	Green (AlGaInP)	vvalei Cledi	20	55	

- 1. 01/2 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	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Yellow Green	590 574		nm	I==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	V _R = 5V

Notes:

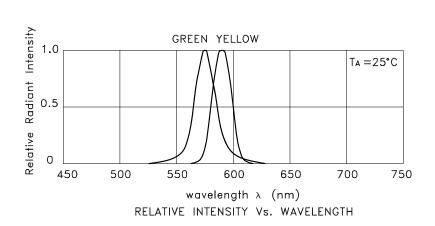
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

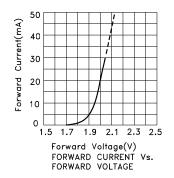
Parameter	Super Bright Yellow	Green	Units		
Power dissipation	75	75	mW		
DC Forward Current	30	30	mA		
Peak Forward Current [1]	175	150	mA		
Reverse Voltage		V			
Operating Temperature	-40°C To +85°C				
Storage Temperature	-40°C To +85°C				

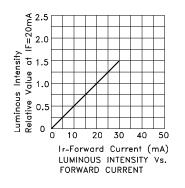
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

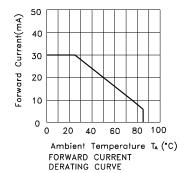
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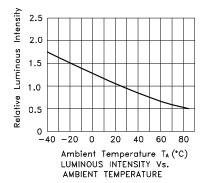


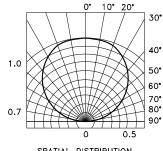
APTB1612SYKCGKC-F01 Super Bright Yellow









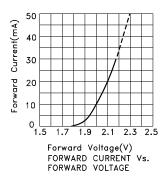


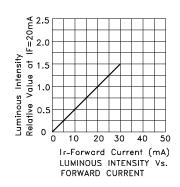
SPATIAL DISTRIBUTION

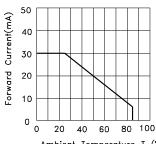
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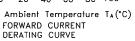
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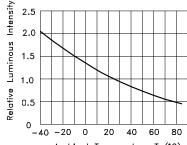
Green



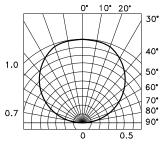








Ambient Temperature T_A (°C) LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

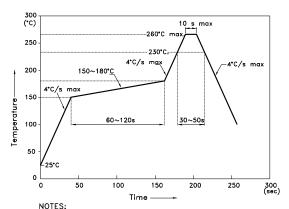
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



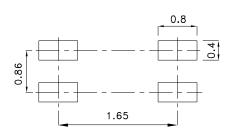
- NOTES:

 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

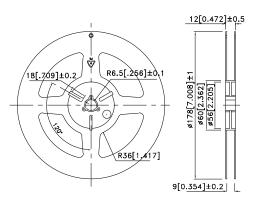
 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

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

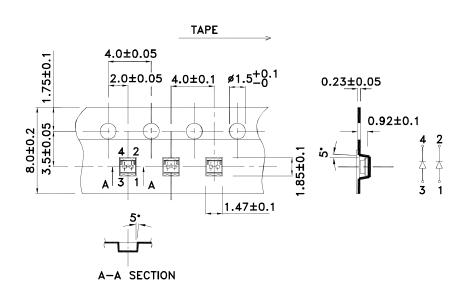
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Reel Dimension



Tape Dimensions (Units: mm)



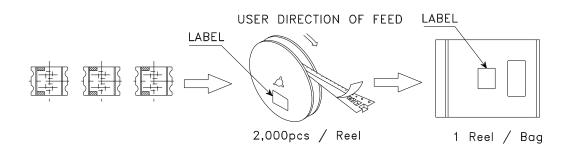
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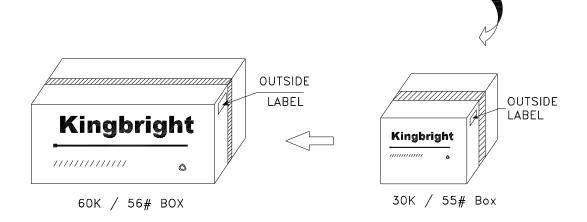
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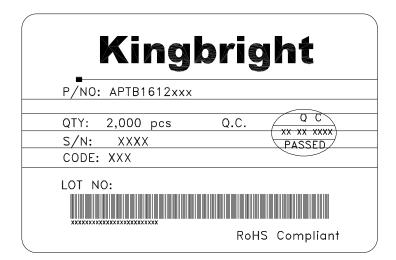
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PACKING & LABEL SPECIFICATIONS

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