

#### 3.0x2.5mm SURFACE MOUNT LED LAMP

PRELIMINARY SPEC

Part Number: APBL3025SYKCGKC-F01

Super Bright Yellow

Green

#### **Features**

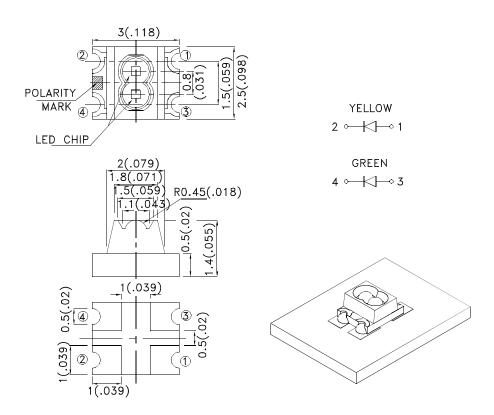
- 3.0mmx2.5mm SMT LED, 1.4mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for back light and indicator.
- Various colors and lens types available.
- Inner lens type.
- Moisture sensitivity level : level 3.
- Package: 2000pcs / reel.
- RoHS compliant.

## 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**



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2 (0.008")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.4. The device has a single mounting surface. The device must be mounted according to the specifications.





SPEC NO: DSAI5361 APPROVED: WYNEC **REV NO: V.2 CHECKED: Allen Liu**  **DATE: OCT/20/2009** DRAWN: Y.L.Zhong PAGE: 1 OF 6 ERP: 1203000939

### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		, , , , , , , , , , , , , , , , , , ,	Min.	Тур.	201/2
APBL3025SYKCGKC-F01	Super Bright Yellow (AlGaInP)	WATER CLEAR	70	150	100°
	Green (AlGaInP)	WATER CLEAR	36	120	

- 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	Ir=20mA
λD [1]	Dominant Wavelength	Super Bright Yellow Green	590 570		nm	Ir=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:

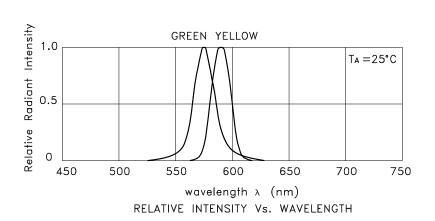
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

# Absolute Maximum Ratings at TA=25°C

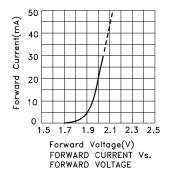
Parameter	Super Bright Yellow Green		Units			
Power dissipation	75	75	mW			
DC Forward Current	30	30	mA			
Peak Forward Current [1]	175	150	mA			
Reverse Voltage		V				
Operating Temperature	-40°C To +85°C					
Storage Temperature	-40°C To +85°C					

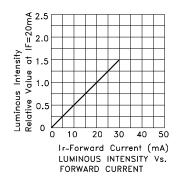
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

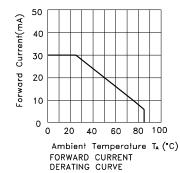
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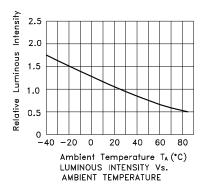


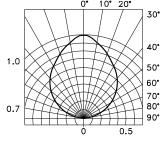
## APBL3025SYKCGKC-F01 Super Bright Yellow







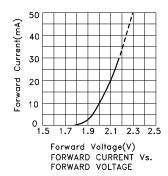


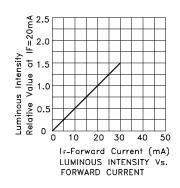


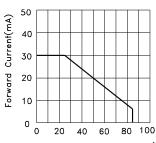
SPATIAL DISTRIBUTION

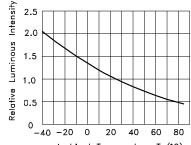
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### Green



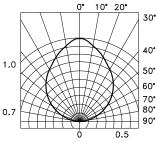












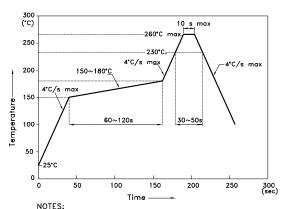
SPATIAL DISTRIBUTION

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#### APBL3025SYKCGKC-F01

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.



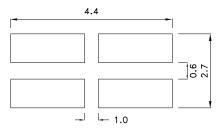
- NOTES:

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

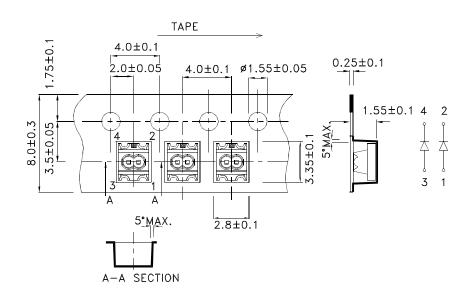
  2.Don't cause stress to the epoxy resin while it is exposed to high temperature. to high temperature.

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

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



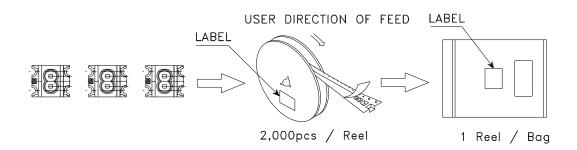
### **Tape Dimensions** (Units: mm)

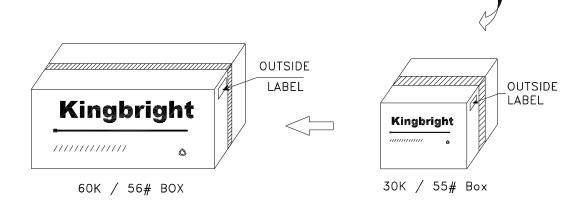


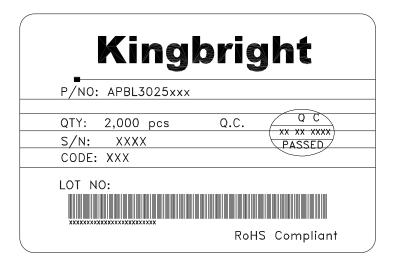
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### **PACKING & LABEL SPECIFICATIONS**

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