

## **Excellent Integrated System Limited**

Stocking Distributor

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Kingbright APBVA3010SYKCGKC

For any questions, you can email us directly: sales@integrated-circuit.com



## 3.0mmx1.0mm RIGHT ANGLE SMD CHIP LED LAMP

Part Number: APBVA3010SYKCGKC

Super Bright Yellow Green

### **Features**

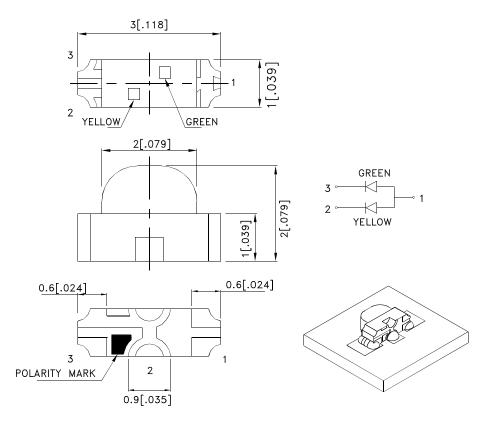
- 3.0mmx1.0mm right angle SMT LED, 2.0mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

### 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:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.15(0.006") 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.





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## **Distributor of Kingbright: Excellent Integrated System Limited**

Datasheet of APBVA3010SYKCGKC - LED GREEN/YLW CLEAR 3SMD R/A Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

# Kingbright

### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		, , , , , , , , , , , , , , , , , , ,	Min.	Тур.	201/2
APBVA3010SYKCGKC	Super Bright Yellow (AlGaInP)	WATER CLEAR	50	150	140°
	Green (AlGalnP)	WATER CLEAR	18	50	

- 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline 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 IF=20mA	
λD [1]	Dominant Wavelength	Super Bright Yellow Green	590 570		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Yellow Green	20 20		nm	IF=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	IF=20mA
lR	Reverse Current	Super Bright Yellow Green		10 10	uA	V <sub>R</sub> = 5V

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

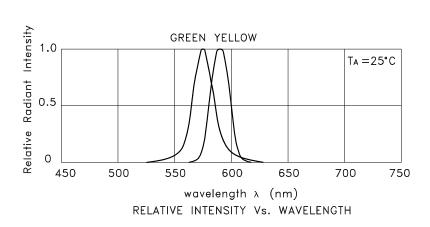
## Absolute Maximum Ratings at TA=25°C

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				

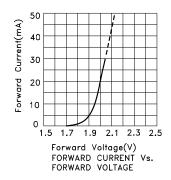
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

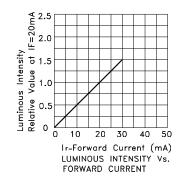
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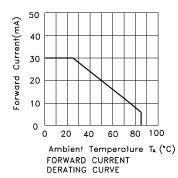


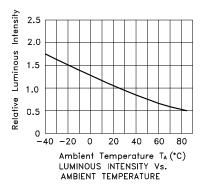


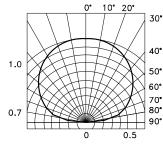
## APBVA3010SYKCGKC Super Bright Yellow









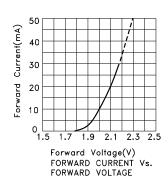


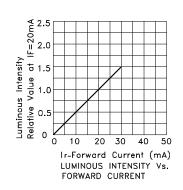
SPATIAL DISTRIBUTION

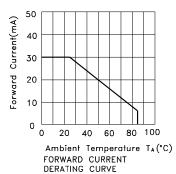
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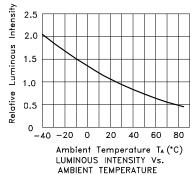


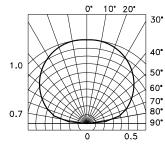
### Green











SPATIAL DISTRIBUTION

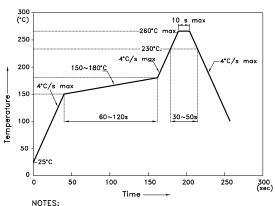
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### **APBVA3010SYKCGKC**

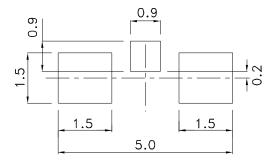
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

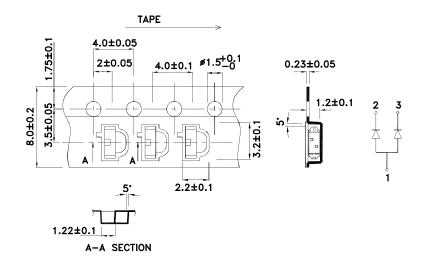


1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
3.Number of reflow process shall be 2 times or less.

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



## Tape Dimensions (Units : mm)

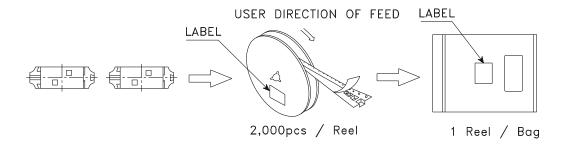


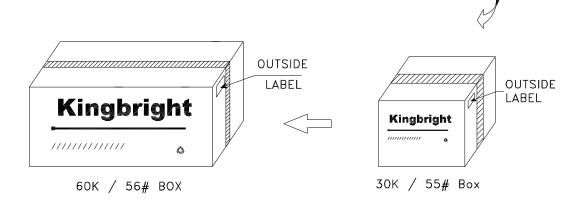
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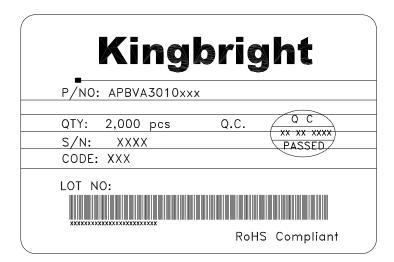




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