

Part Number: APB3025NSGC-F01

Pure Orange  
Super Bright Green

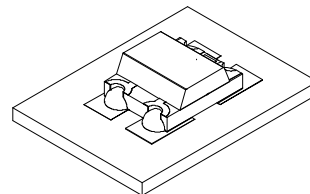
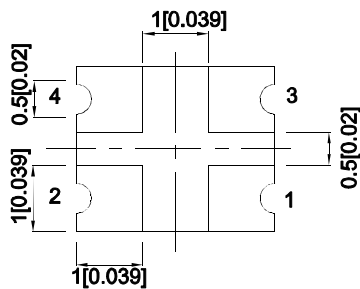
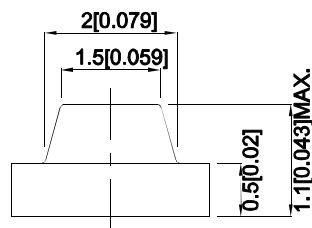
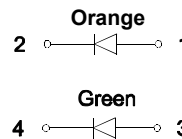
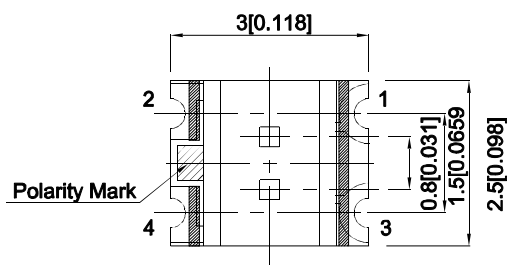
### Features

- 3.0mmx2.5mm SMD LED, 1.1mm thickness.
- Bi-color, low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

### Descriptions

- The Pure Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Pure Orange Light Emitting Diode.
- The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  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.



## Selection Guide

Part No.	Emitting Color (Material)	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APB3025NSGC-F01	Pure Orange (GaAsP/GaP)	Water Clear	8	15	160°
			*3	*8	
	Super Bright Green (GaP)		8	15	
			*8	*15	

**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%.
- \* Luminous intensity value is traceable to CIE127-2007 standards.

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Pure Orange Super Bright Green	607 565		nm	IF=20mA
λD [1]	Dominant Wavelength	Pure Orange Super Bright Green	602 568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Pure Orange Super Bright Green	35 30		nm	IF=20mA
C	Capacitance	Pure Orange Super Bright Green	15 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Pure Orange Super Bright Green	2.05 2.2	2.5 2.5	V	IF=20mA
IR	Reverse Current	Pure Orange Super Bright Green		10 10	uA	VR = 5V

**Notes:**

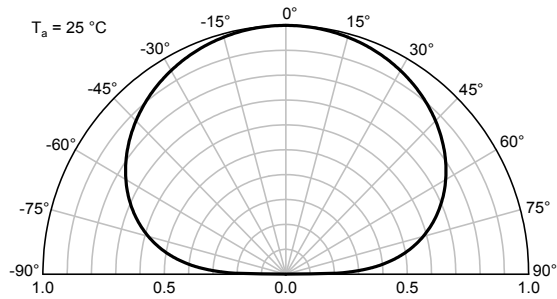
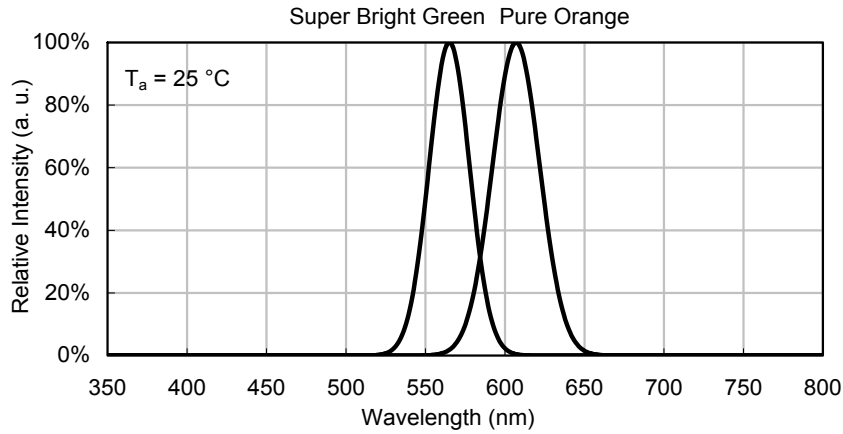
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to CIE127-2007 standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

## Absolute Maximum Ratings at TA=25°C

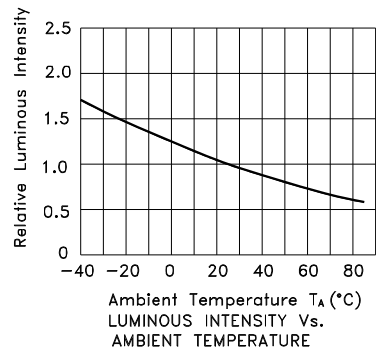
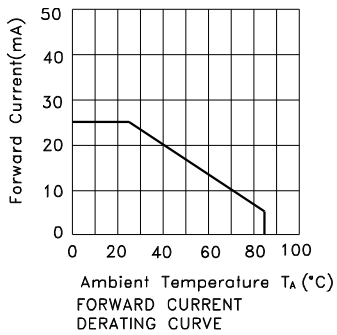
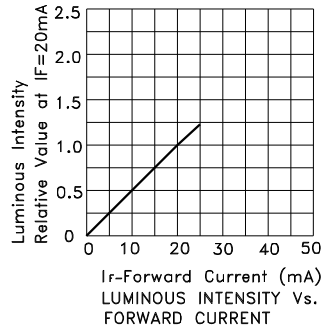
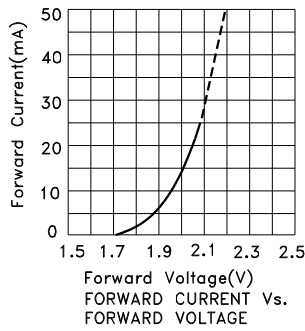
Parameter	Pure Orange	Super Bright Green	Units
Power dissipation	62.5	62.5	mW
DC Forward Current	25	25	mA
Peak Forward Current [1]	145	140	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

**Notes:**

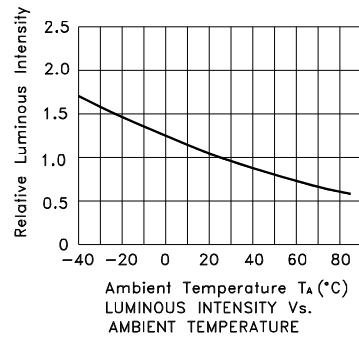
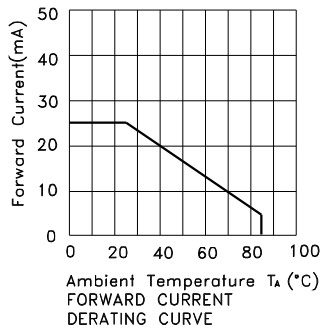
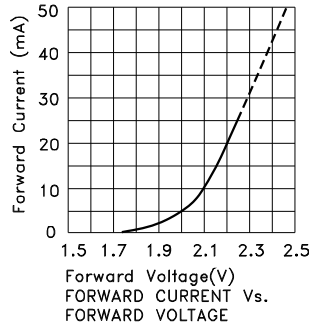
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



**APB3025NSGC-F01**  
**Pure Orange**



## Super Bright Green



## APB3025NSGC-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.

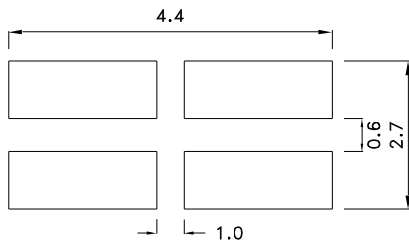
Reflow Soldering Profile For Lead-free SMT Process.



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

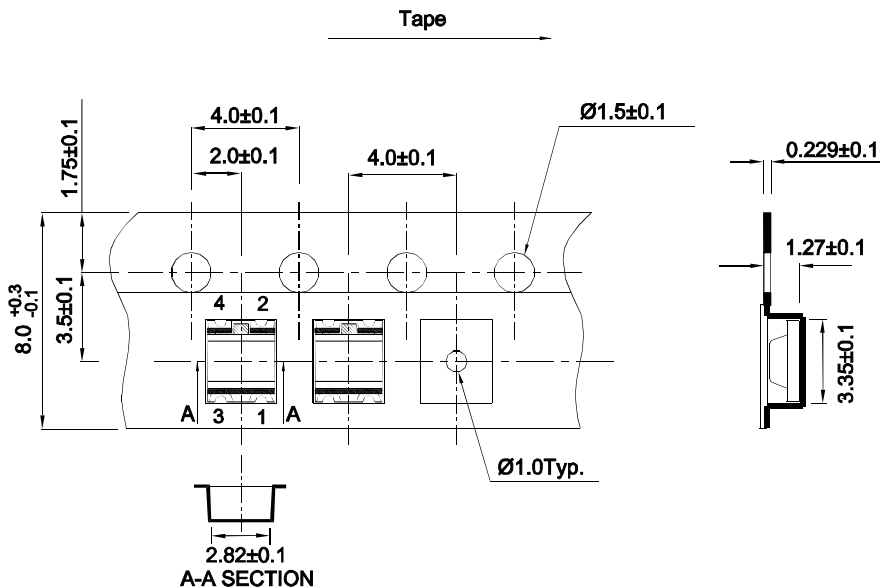
### Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



### Reel Dimension

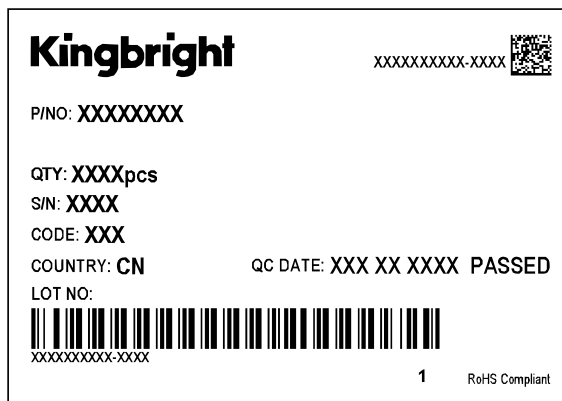
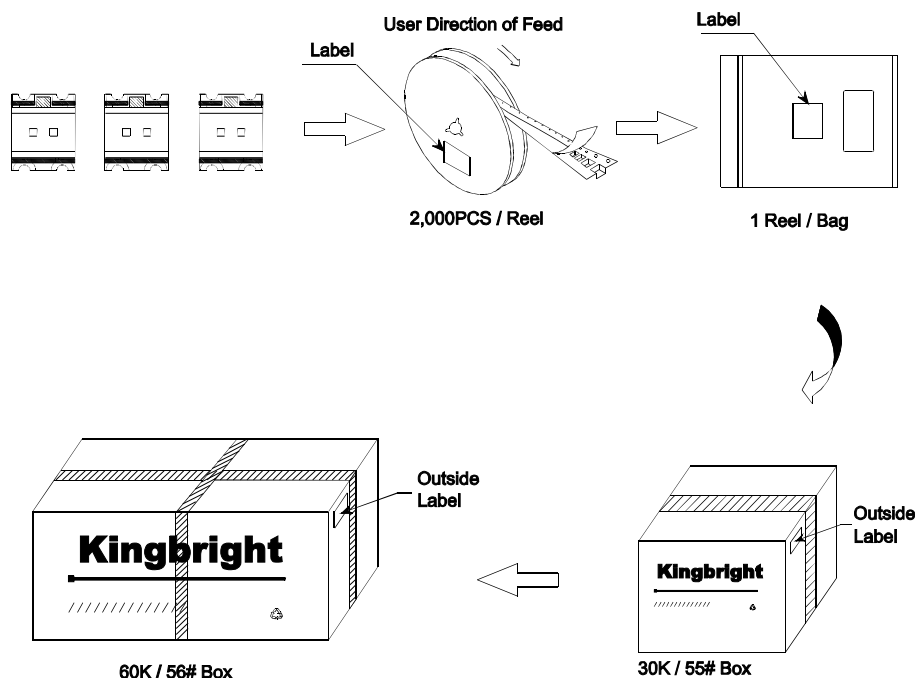


### Tape Dimensions (Units : mm)



## PACKING & LABEL SPECIFICATIONS

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