

Part Number: APB3025NSGC-F01

Pure Orange
Super Bright Green

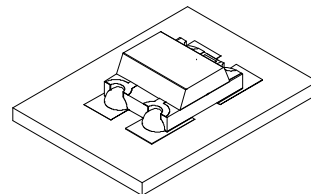
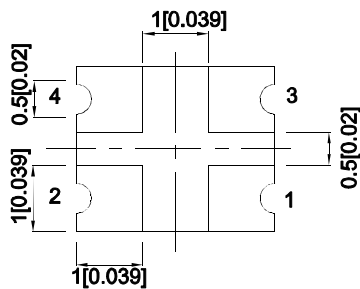
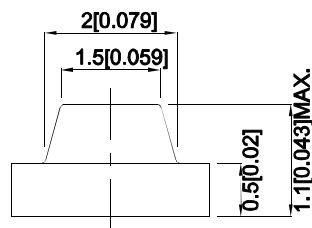
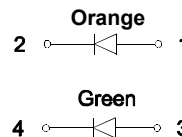
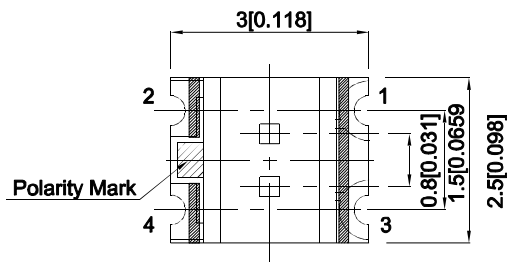
Features

- 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
λ_{peak}	Peak Wavelength	Pure Orange Super Bright Green	607 565		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Pure Orange Super Bright Green	602 568		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Pure Orange Super Bright Green	35 30		nm	I _F =20mA
C	Capacitance	Pure Orange Super Bright Green	15 15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Pure Orange Super Bright Green	2.05 2.2	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	Pure Orange Super Bright Green		10 10	uA	V _R = 5V

Notes:

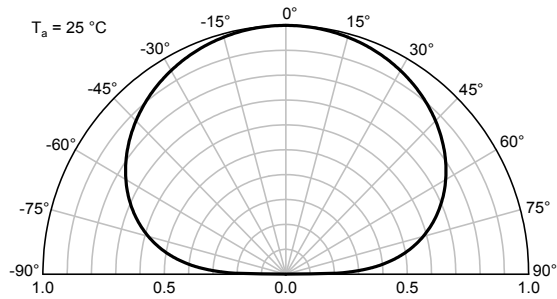
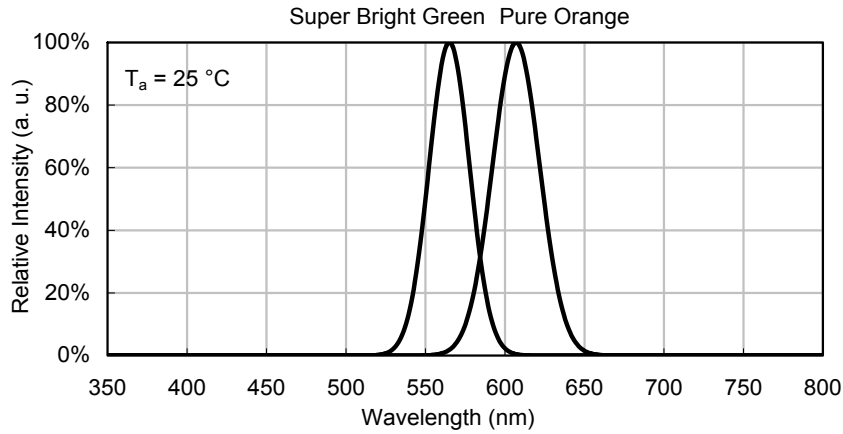
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to CIE127-2007 standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

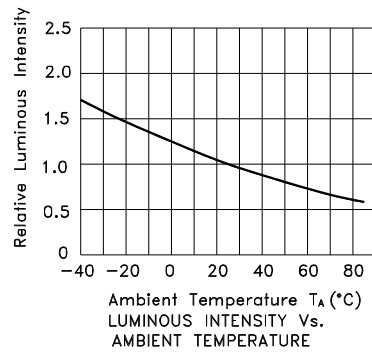
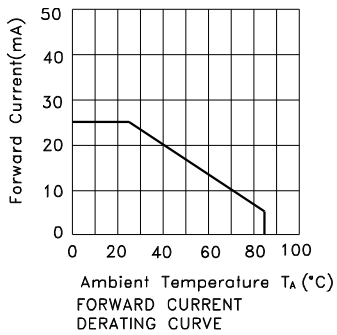
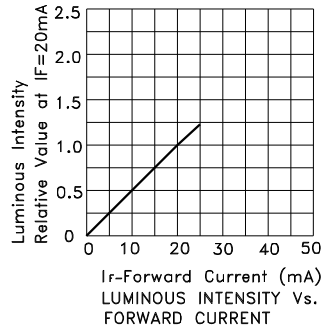
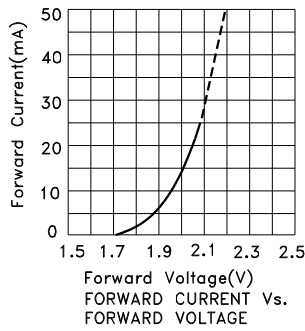
Parameter	Pure Orange	Super Bright Green	Units
Power dissipation	62.5	62.5	mW
DC Forward Current	25	25	mA
Peak Forward Current [1]	145	140	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Notes:

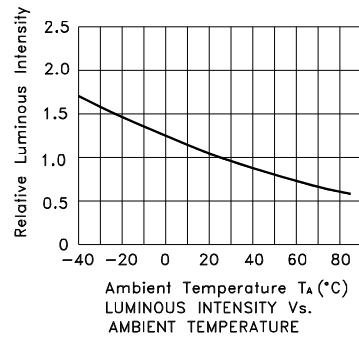
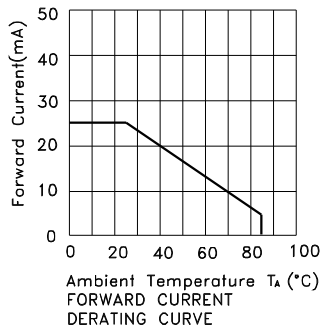
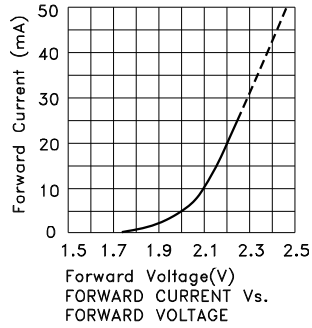
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



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Pure Orange



Super Bright Green



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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.

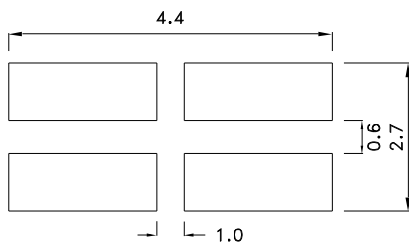
Reflow Soldering Profile For Lead-free SMT Process.



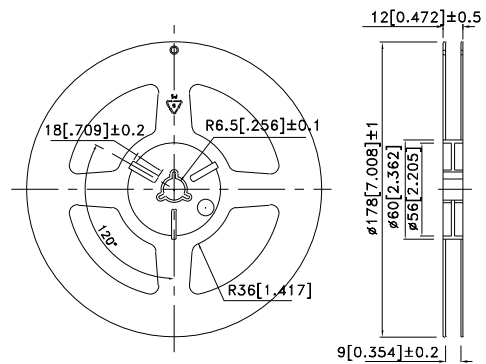
NOTES:

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.

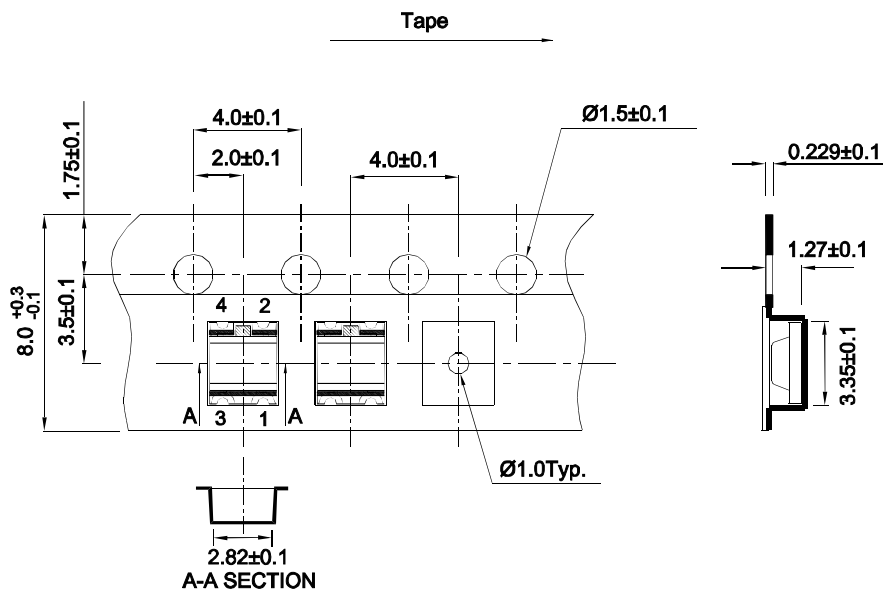
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension

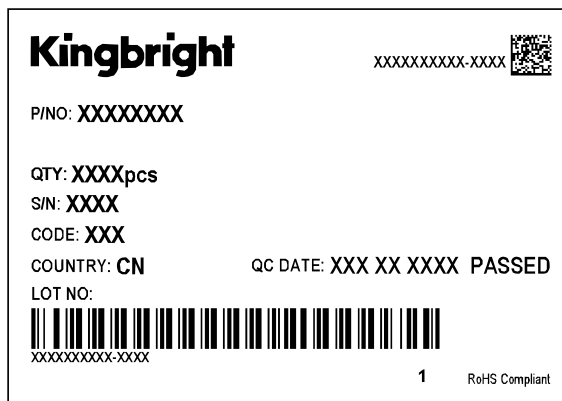
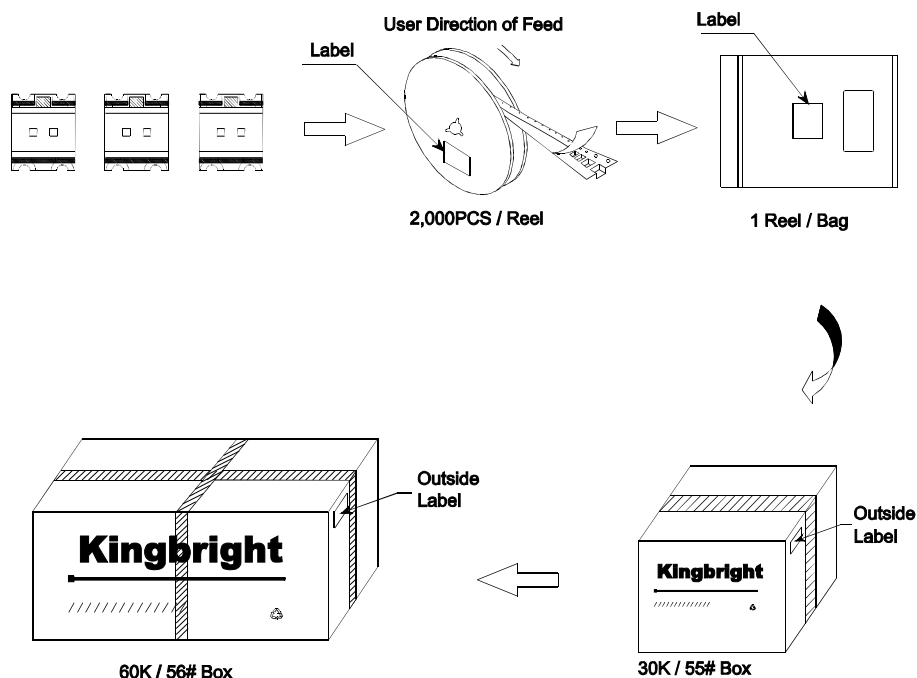


Tape Dimensions (Units : mm)



PACKING & LABEL SPECIFICATIONS

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