

APTB1615SGNC-F01

SUPER BRIGHT GREEN  
PURE ORANGE

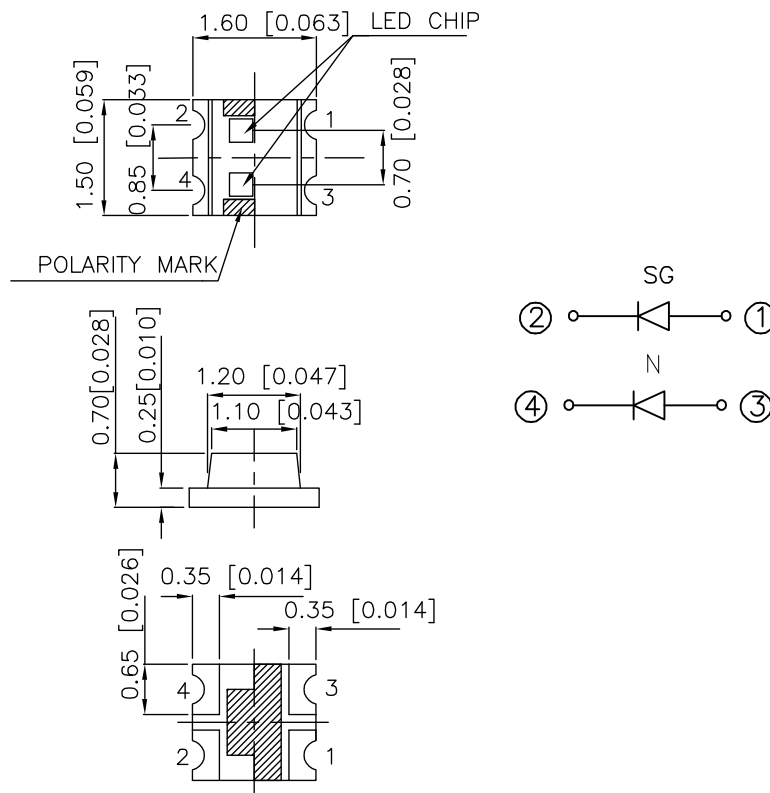
### Features

- 1.6mmx1.5mm SMT LED, 0.7mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.

### Description

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.  
The Pure Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Pure Orange 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. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
APT B1615SGNC-F01	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	4	12	120°
	PURE ORANGE (GaAsP/GaP)		4	12	

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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

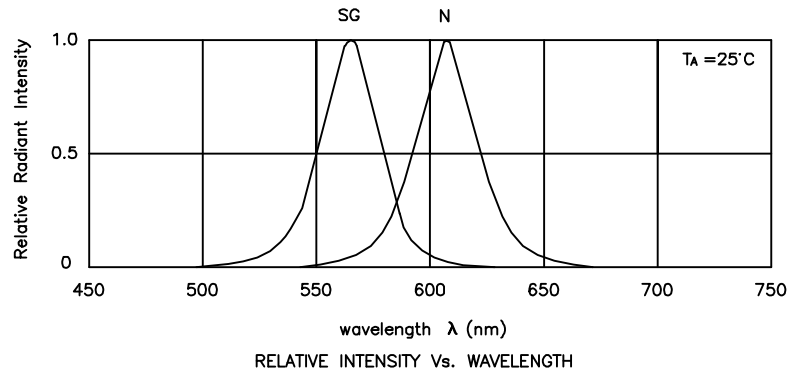
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Super Bright Green Pure Orange	565 607		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominant Wavelength	Super Bright Green Pure Orange	568 610		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	Super Bright Green Pure Orange	30 35		nm	I <sub>F</sub> =20mA
C	Capacitance	Super Bright Green Pure Orange	15 15		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Super Bright Green Pure Orange	2.2 2.05	2.5 2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	All		10	uA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at TA=25°C

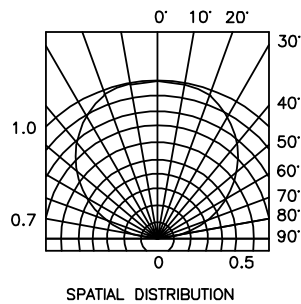
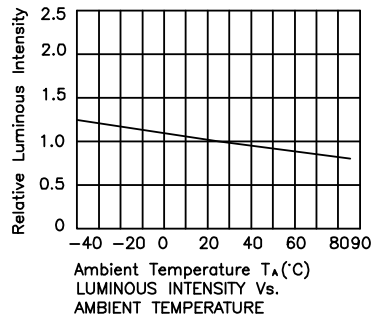
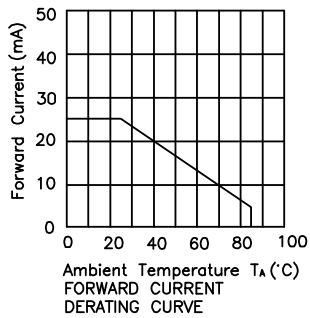
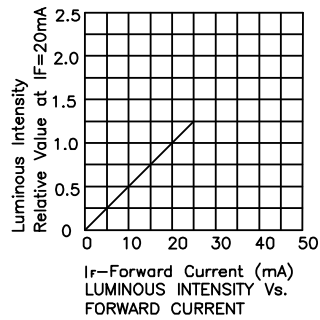
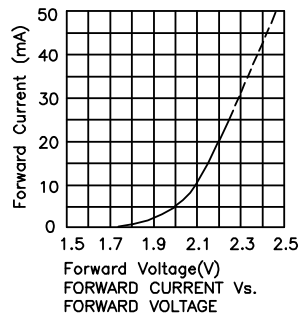
Parameter	Super Bright Green	Pure Orange	Units
Power dissipation [2]	105	105	mW
DC Forward Current	25	25	mA
Peak Forward Current [1]	140	145	mA
Reverse Voltage	5	5	V
Operating / Storage Temperature	-40°C To +85°C		

Note:

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

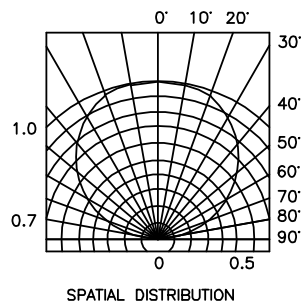
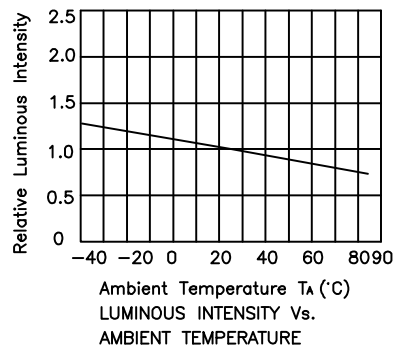
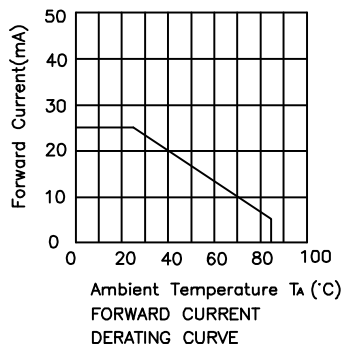
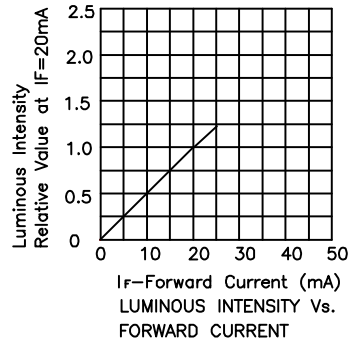
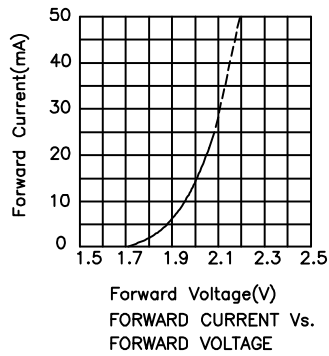


## APTB1615SGNC-F01 Super Bright Green



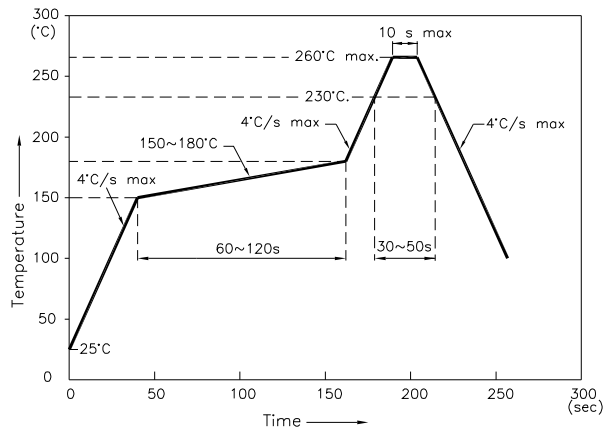
# Kingbright

## Pure Orange



## APT B1615SGNC-F01

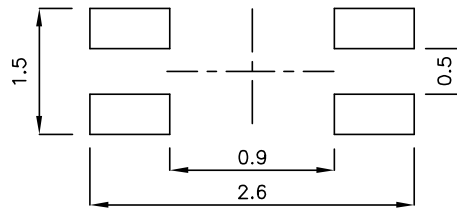
Reflow Soldering Profile For Lead-free SMT Process.



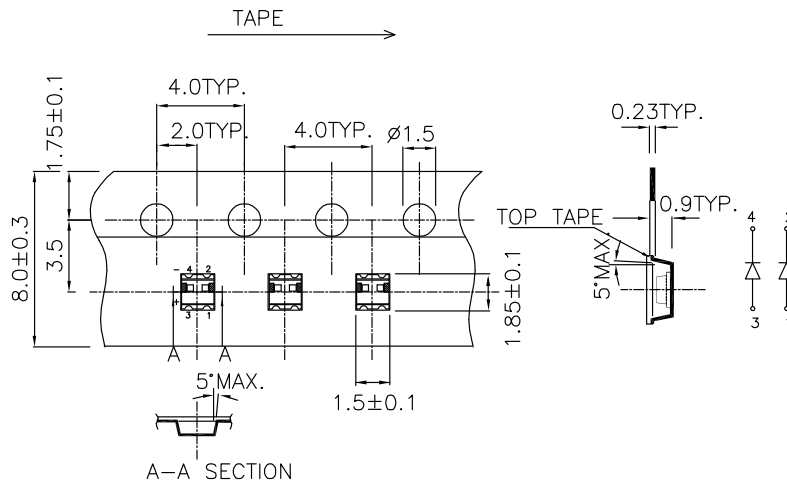
**NOTES:**

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)



### Tape Specifications (Units : mm)



**Remarks:**

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.