

Part Number: APTB1612SGNC-F01
 SUPER BRIGHT GREEN
 PURE ORANGE

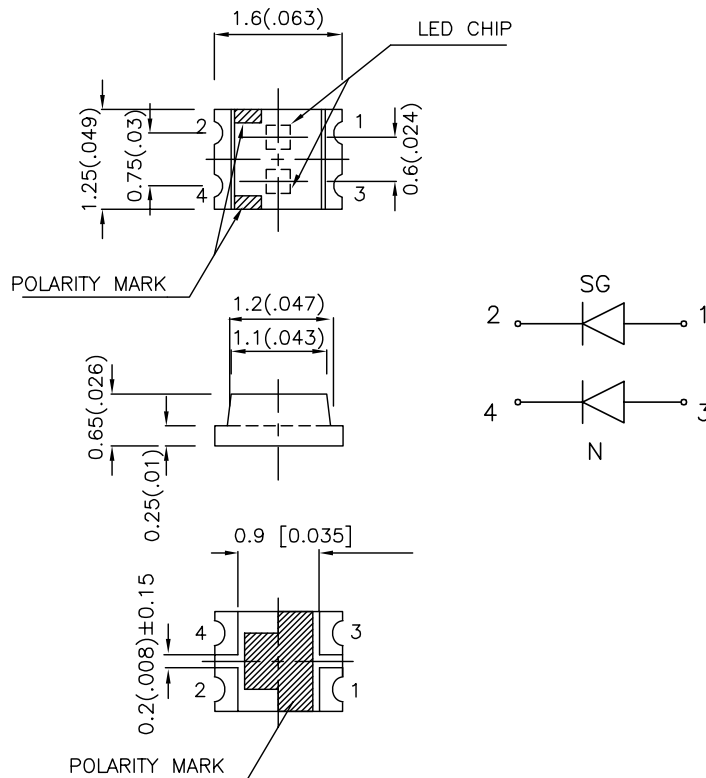
Features

- 1.6mmx1.25mm SMT LED, 0.65mm THICKNESS.
- BI-COLOR, 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 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) [2] @ 20mA | | Viewing Angle [1] |
|-------------------|--------------------------|-------------|------------------------|------|----------------------|
| | | | Min. | Typ. | θ1/2 |
| APT B1612SGNC-F01 | SUPER BRIGHT GREEN (GaP) | WATER CLEAR | 4 | 12 | 120° |
| | PURE ORANGE (GaAsP/GaP) | | 4 | 12 | |

Notes:

- θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- Luminous intensity / luminous flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|--------------------|--------------------------|-----------------------------------|-------------|------------|-------|---------------------------|
| λ _{peak} | Peak Wavelength | Super Bright Green Pure Orange | 565 607 | | nm | I _F =20mA |
| λ _D [1] | Dominant Wavelength | Super Bright Green Pure Orange | 568 610 | | nm | I _F =20mA |
| Δλ _{1/2} | Spectral Line Half-width | Super Bright Green Pure Orange | 30 35 | | nm | I _F =20mA |
| C | Capacitance | Super Bright Green Pure Orange | 15 15 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | Super Bright Green Pure Orange | 2.2 2.05 | 2.5 2.5 | V | I _F =20mA |
| I _R | Reverse Current | Super Bright Green Pure Orange | | 10 | uA | V _R = 5V |

Notes:

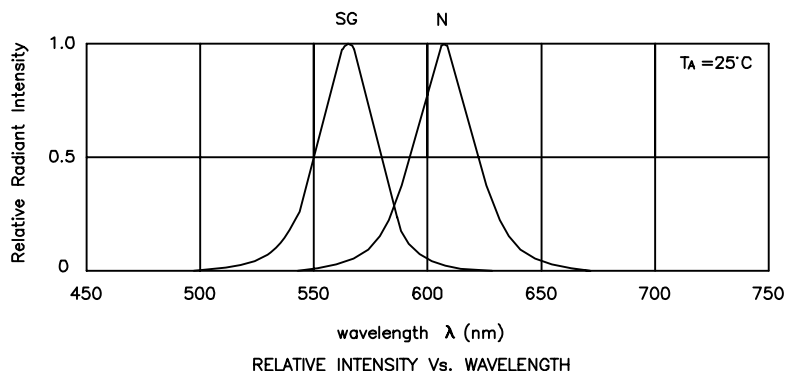
- Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

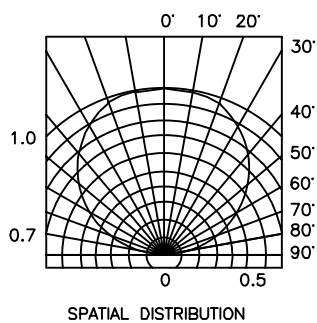
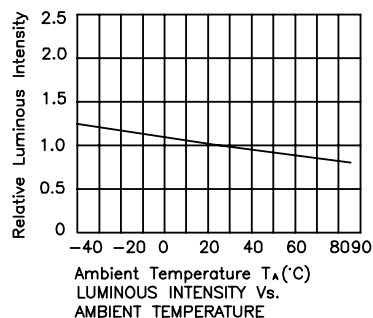
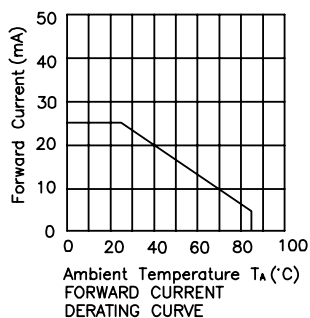
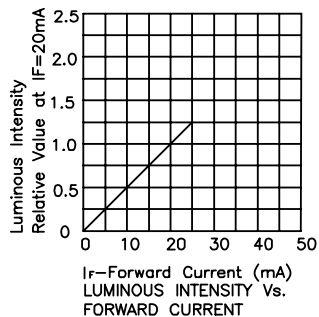
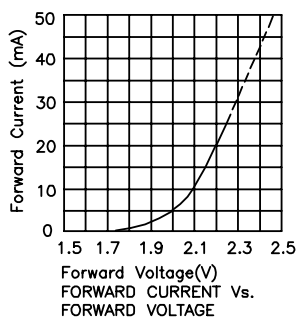
| Parameter | Super Bright Green | Pure Orange | Units |
|---------------------------------|--------------------|-------------|-------|
| Power dissipation [2] | 105 | 105 | mW |
| DC Forward Current | 25 | 25 | mA |
| Peak Forward Current [1] | 140 | 145 | mA |
| Reverse Voltage | 5 | 5 | V |
| Operating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

Note:

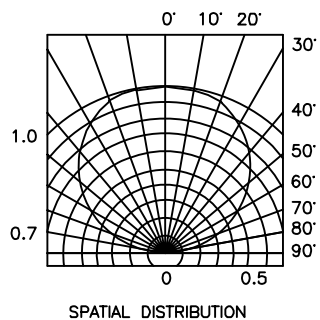
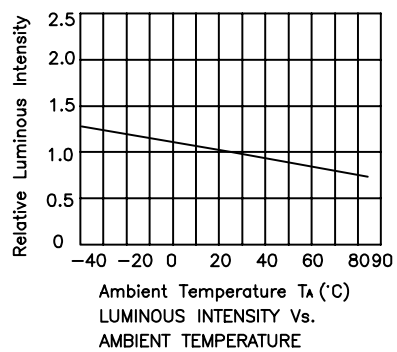
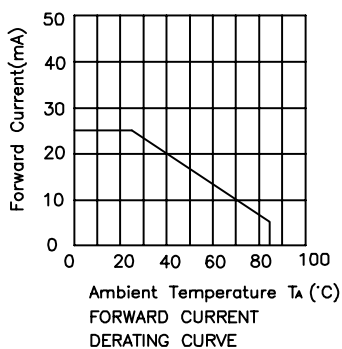
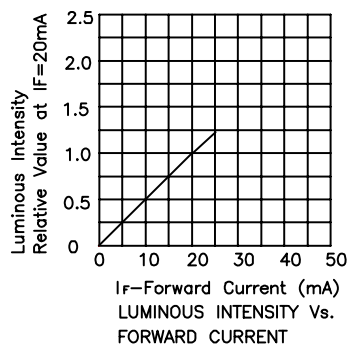
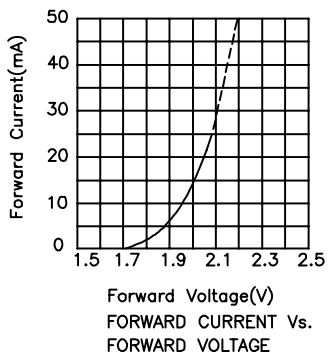
- 1/10 Duty Cycle, 0.1ms Pulse Width.



APTB1612SGNC-F01 Super Bright Green

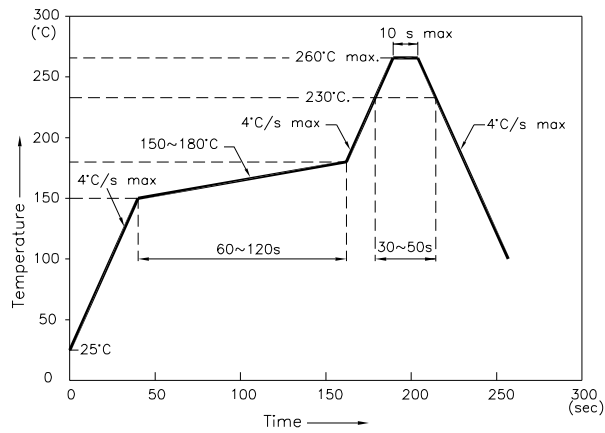


Pure Orange



APT B1612SGNC-F01

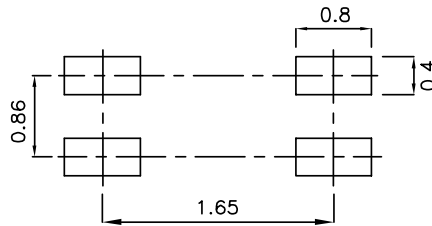
Reflow Soldering Profile For Lead-free SMT Process.



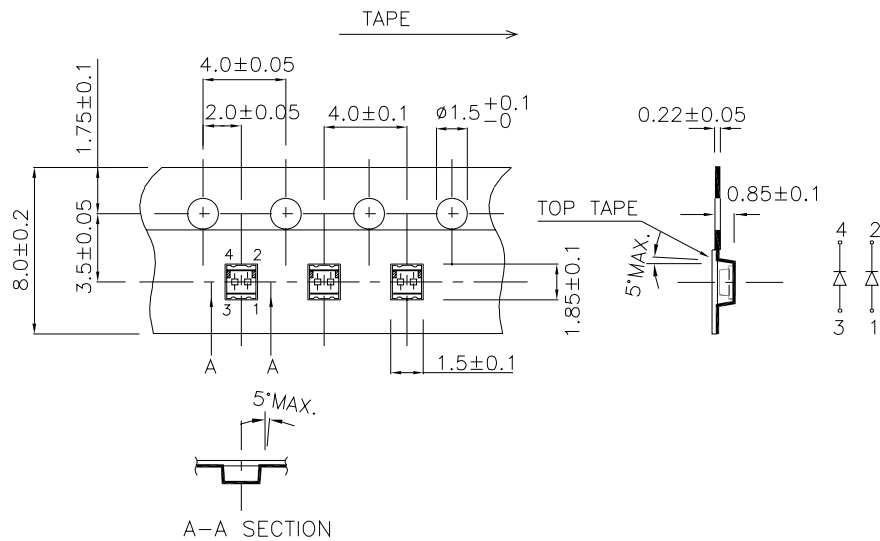
NOTES:

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; Tolerance: ±0.1)

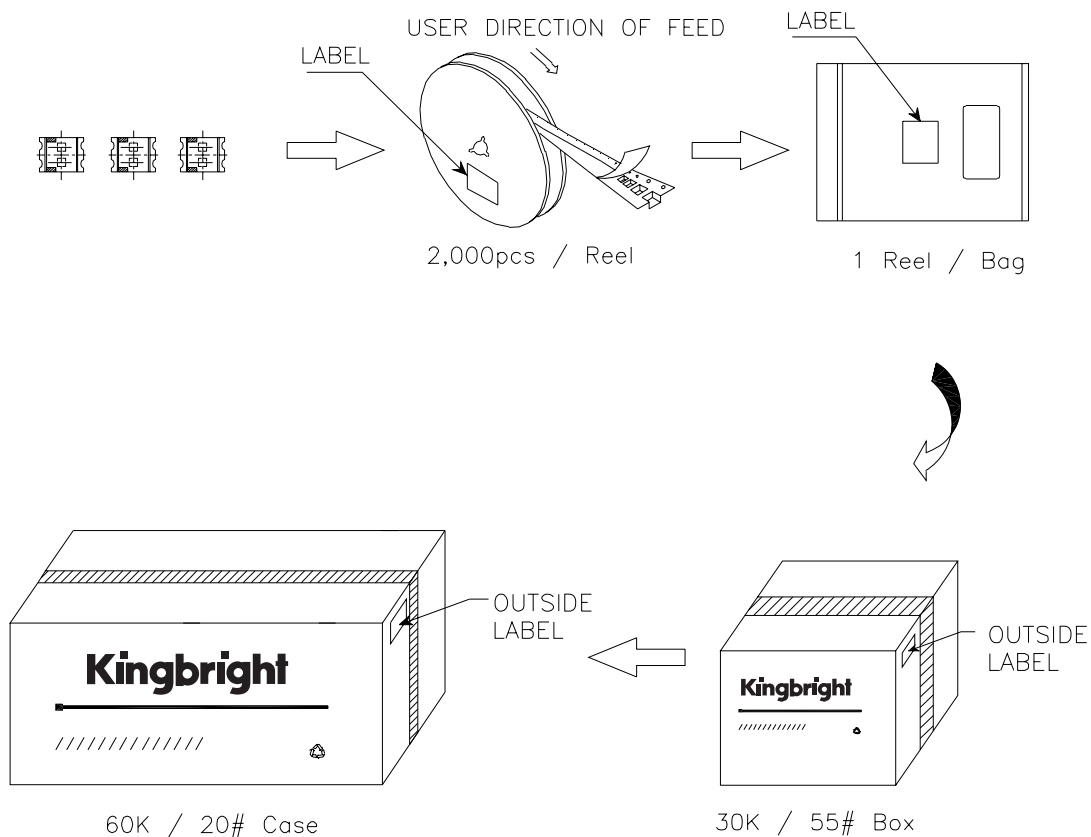



Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

APTB1612SGNC-F01



| | |
|---|--|
| Kingbright | |
| P/NO: APTB1612XXX | |
| QTY: 2,000 pcs | Q.C. Q C xx xx xxxx PASSED |
| S/N: XXXX | |
| CODE: XXX | |
| LOT NO: | |
|  <small>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</small> | |
| MADE IN CHINA | RoHS Compliant |