

Part Number: APB3025ESGC-F01

High Efficiency Red
Super Bright Green

Features

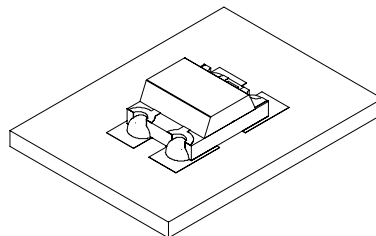
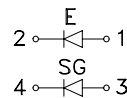
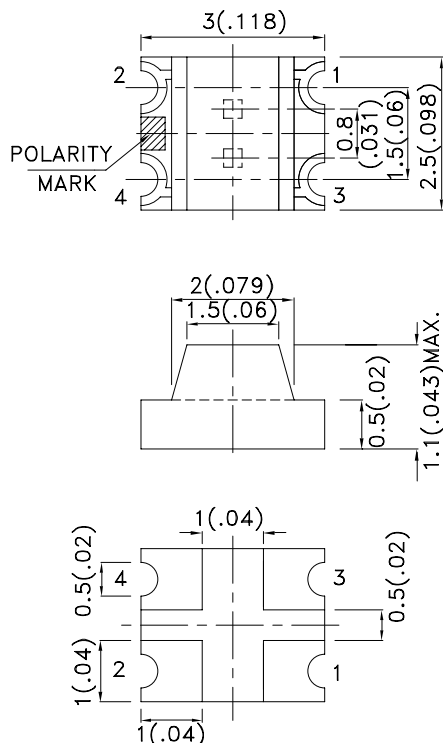
- 3.0mmx2.5mm SMT LED, 1.1mm THICKNESS.
- BI -COLOR,LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide 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. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) [2] @ 20mA | | Viewing Angle [1] |
|-----------------|---------------------------------|-------------|------------------------|------|----------------------|
| | | | Min. | Typ. | 2θ1/2 |
| APB3025ESGC-F01 | High Efficiency Red (GaAsP/GaP) | WATER CLEAR | 4 | 12 | 120° |
| | Super Bright Green (GaP) | | 4 | 12 | |

Notes:

1. θ1/2 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 | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|---|------------|------------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | High Efficiency Red Super Bright Green | 627 565 | | nm | I _F =20mA |
| λ_D [1] | Dominant Wavelength | High Efficiency Red Super Bright Green | 625 568 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | High Efficiency Red Super Bright Green | 45 30 | | nm | I _F =20mA |
| C | Capacitance | High Efficiency Red Super Bright Green | 15 15 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | High Efficiency Red Super Bright Green | 2 2.2 | 2.5 2.5 | V | I _F =20mA |
| I _R | Reverse Current | High Efficiency Red Super Bright Green | | 10 10 | uA | V _R = 5V |

Notes:

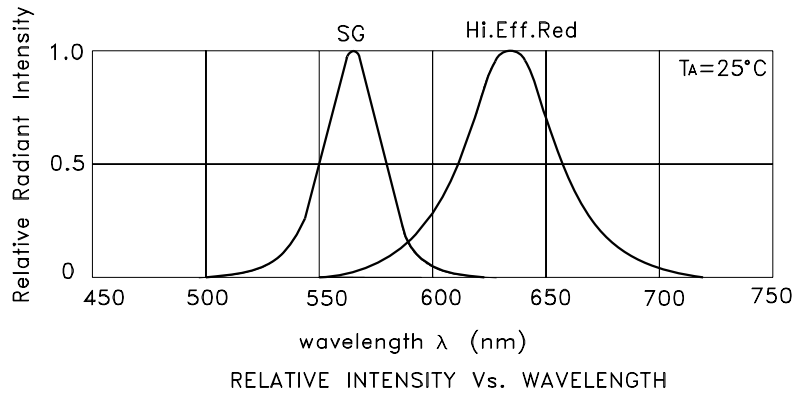
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

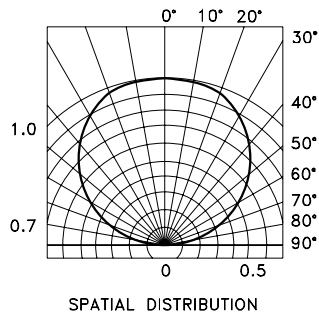
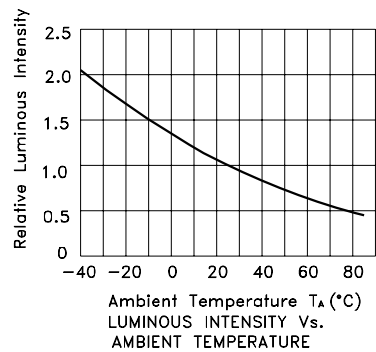
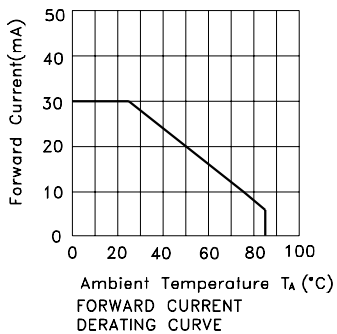
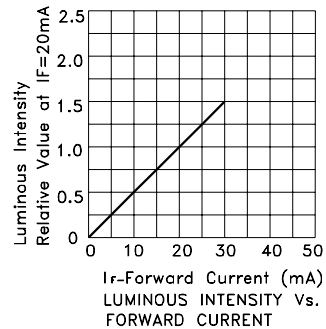
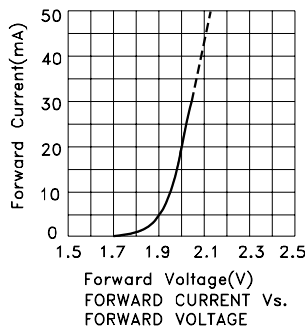
| Parameter | High Efficiency Red | Super Bright Green | Units |
|--------------------------|---------------------|--------------------|-------|
| Power dissipation | 75 | 62.5 | mW |
| DC Forward Current | 30 | 25 | mA |
| Peak Forward Current [1] | 160 | 140 | mA |
| Reverse Voltage | 5 | | V |
| Operating Temperature | -40°C To +85°C | | |
| Storage Temperature | -40°C To +85°C | | |

Note:

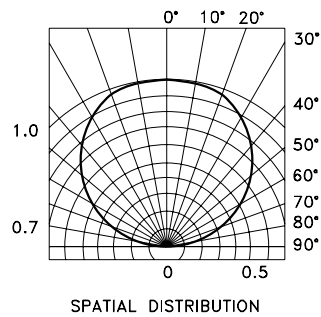
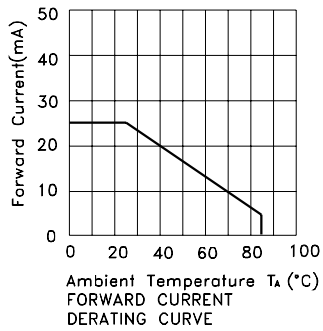
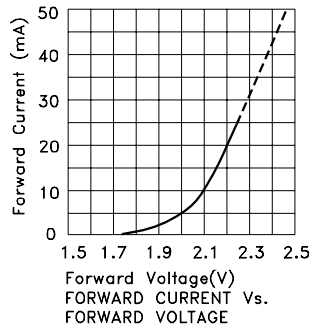
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



APB3025ESGC-F01 High Efficiency Red

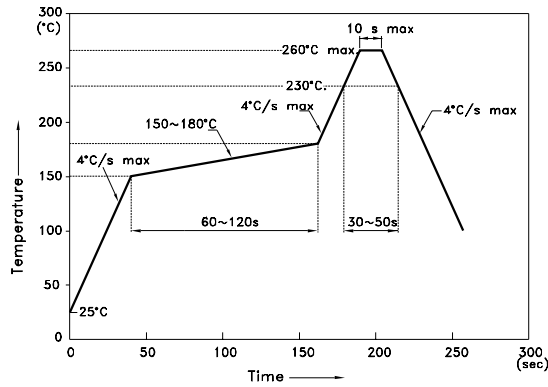


Super Bright Green



APB3025ESGC-F01

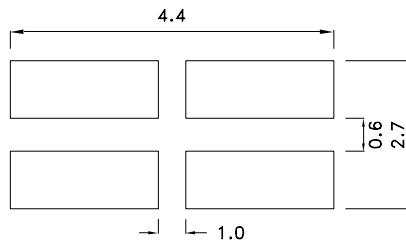
Reflow Soldering Profile For Lead-free SMT Process.



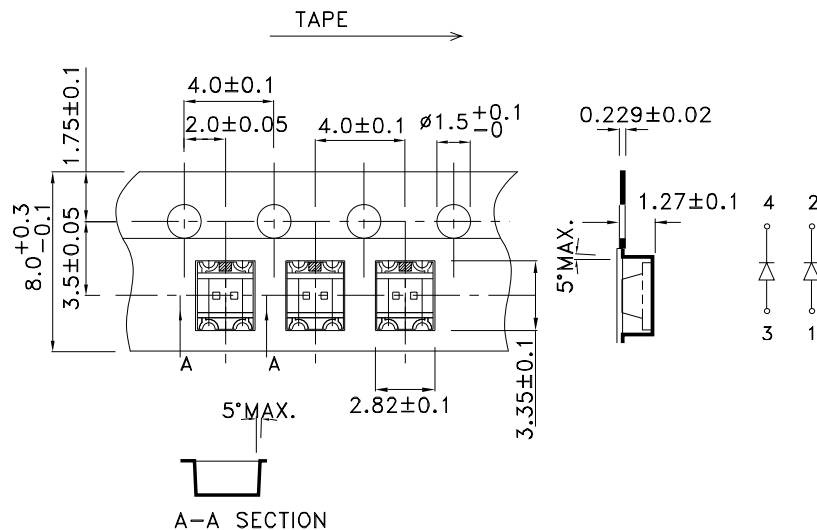
NOTES:

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)



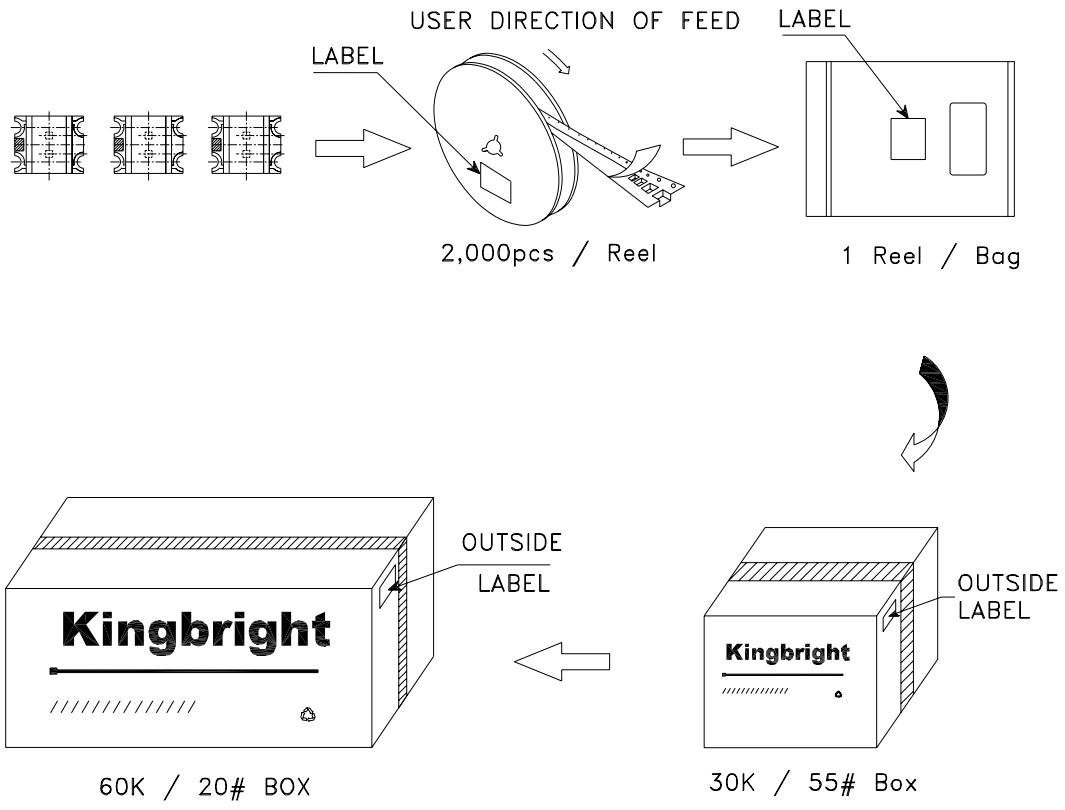
Tape Specifications (Units : mm)




Kingbright

PACKING & LABEL SPECIFICATIONS

APB3025ESGC-F01



| | |
|--|--|
| <h1>Kingbright</h1> | |
| P/NO: APB3025xxx | |
| QTY: 2,000 pcs | Q.C. Q C xx xx xxxx PASSED |
| S/N: XXXX | |
| CODE: XXX | |
| LOT NO: | |
|  | |
| MADE IN CHINA | RoHS Compliant |