

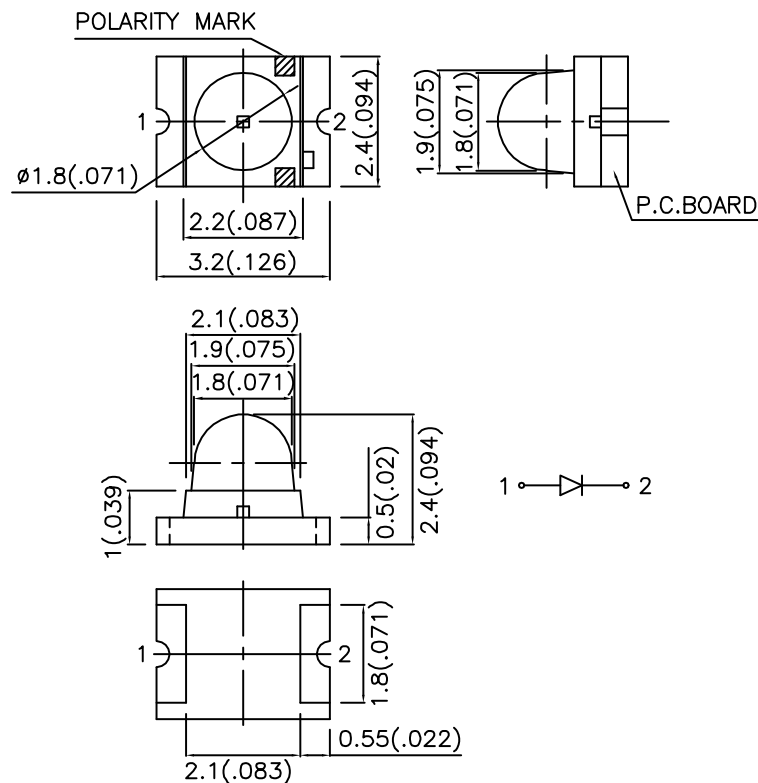
### Features

- 3.2x2.4mm SMT LED, 2.4mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 1500PCS / 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.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$  unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

| Part No.   | Dice                     | Lens Type   | Iv (mcd) [2]<br>@ 20mA |      | Viewing<br>Angle [1] |
|------------|--------------------------|-------------|------------------------|------|----------------------|
|            |                          |             | Min.                   | Typ. | 2θ1/2                |
| APD3224SGC | SUPER BRIGHT GREEN (GaP) | WATER CLEAR | 18                     | 70   | 20°                  |

Notes:

1.  $\theta_{1/2}$  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 T<sub>A</sub>=25°C

| Symbol                | Parameter                | Device             | Typ. | Max. | Units | Test Conditions            |
|-----------------------|--------------------------|--------------------|------|------|-------|----------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Super Bright Green | 565  |      | nm    | I <sub>F</sub> =20mA       |
| $\lambda_D$ [1]       | Dominant Wavelength      | Super Bright Green | 568  |      | nm    | I <sub>F</sub> =20mA       |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Super Bright Green | 30   |      | nm    | I <sub>F</sub> =20mA       |
| C                     | Capacitance              | Super Bright Green | 15   |      | pF    | V <sub>F</sub> =0V; f=1MHz |
| V <sub>F</sub> [2]    | Forward Voltage          | Super Bright Green | 2.2  | 2.5  | V     | I <sub>F</sub> =20mA       |
| I <sub>R</sub>        | Reverse Current          | Super Bright Green |      | 10   | uA    | V <sub>R</sub> = 5V        |

Notes:

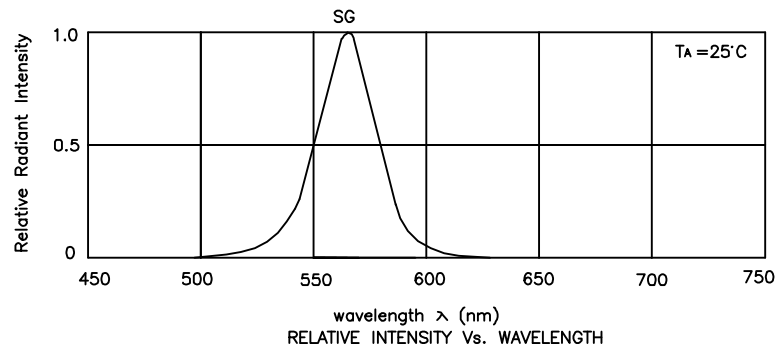
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

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

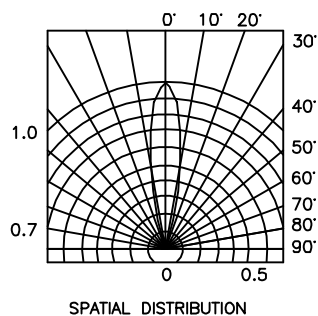
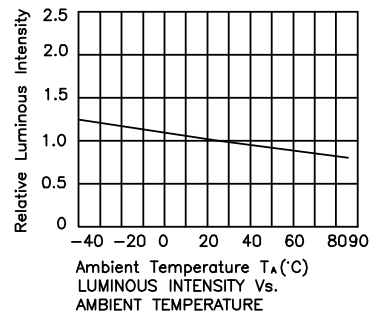
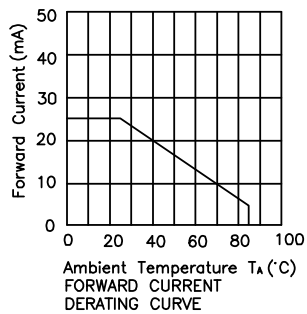
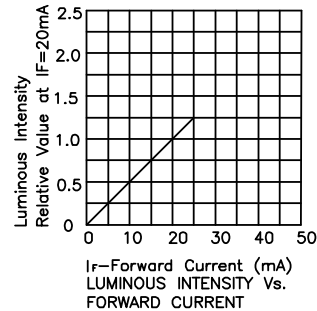
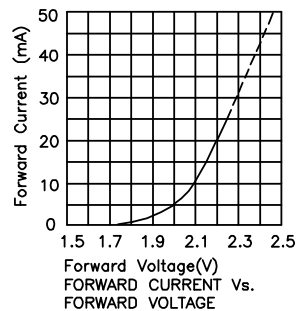
Note:

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



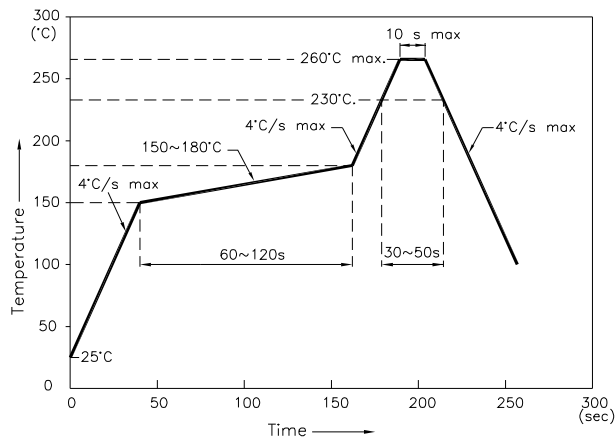
## Super Bright Green

## APD3224SGC



## APD3224SGC

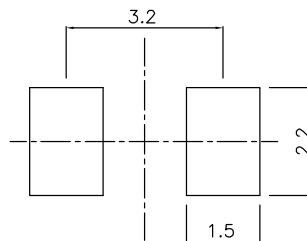
Reflow Soldering Profile For Lead-free SMT Process.



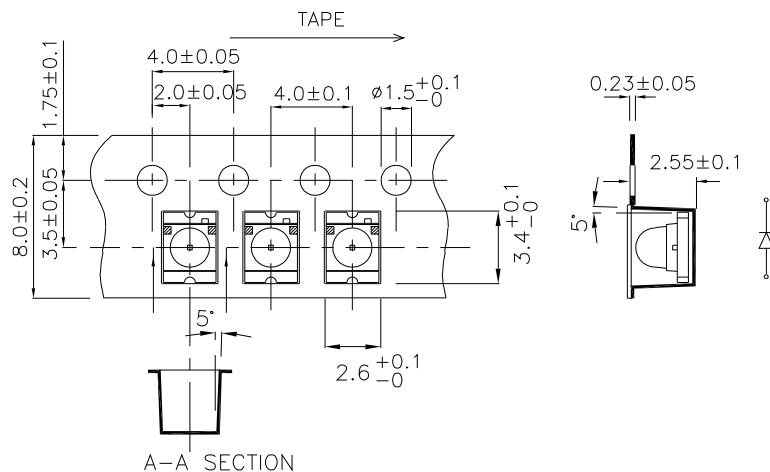
### NOTES:

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)

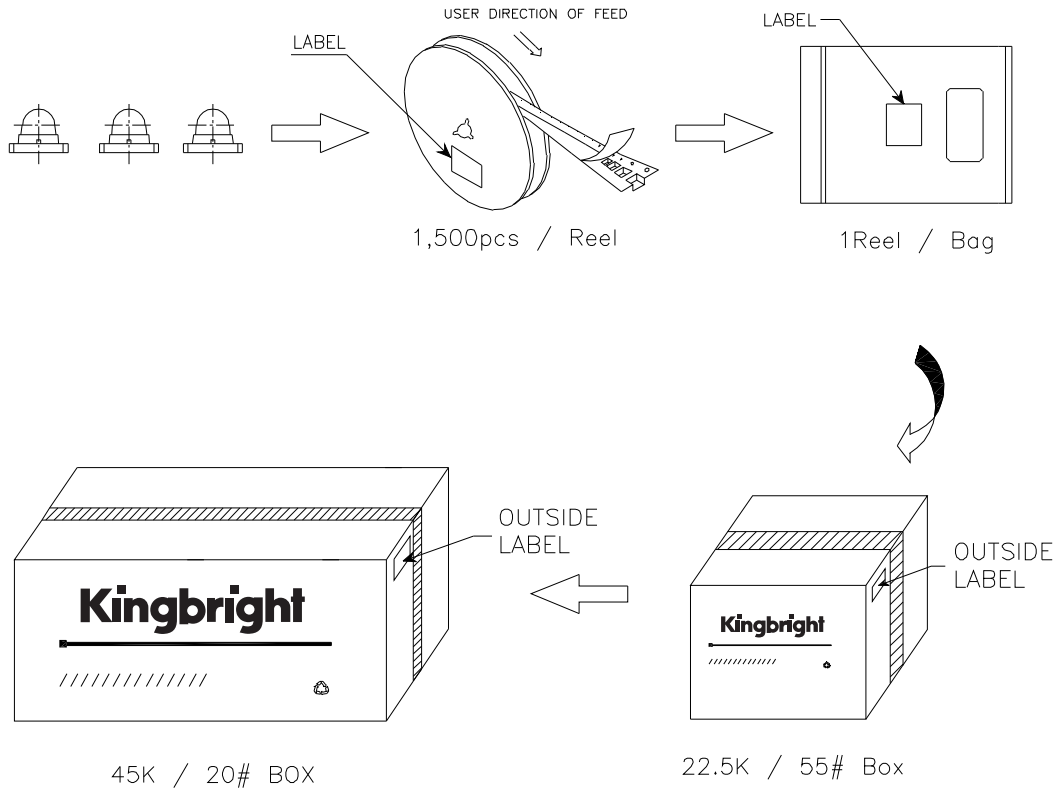


## Tape Specifications (Units : mm)



## PACKING & LABEL SPECIFICATIONS

APD3224SGC



|                                                                                      |                                                                                                                     |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Kingbright</b>                                                                    |                                                                                                                     |
| P/NO: APD3224XXX                                                                     |                                                                                                                     |
| QTY: 1,500 pcs                                                                       | Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Q C<br/>xx xx. xxxx<br/>PASSED</span> |
| S/N: XXXX                                                                            |                                                                                                                     |
| CODE: XXX                                                                            |                                                                                                                     |
| LOT NO:                                                                              |                                                                                                                     |
|  |                                                                                                                     |
| RoHS Compliant                                                                       |                                                                                                                     |