

P/N: AM2520SGD03

SUPER BRIGHT GREEN

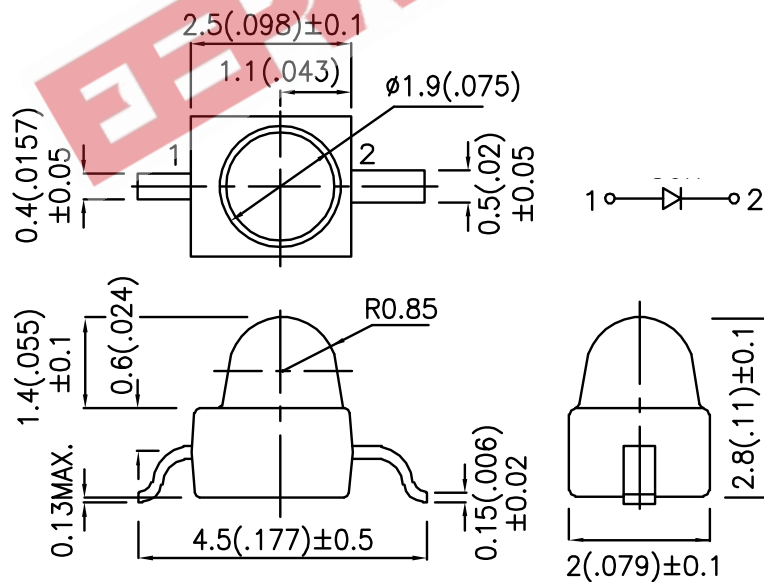
### Features

- SUBMINIATURE PACKAGE.
- WIDE VIEWING ANGLE.
- GULL WING LEAD.
- LONG LIFE - SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.
- PACKAGE : 1000PCS / REEL.
- 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  $\pm 0.25(0.01)$  unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

## Selection Guide

| Part No.    | Dice                     | Lens Type      | Iv (mcd)<br>@ 20mA |      | Viewing<br>Angle |
|-------------|--------------------------|----------------|--------------------|------|------------------|
|             |                          |                | Min.               | Typ. | 2 θ 1/2          |
| AM2520SGD03 | SUPER BRIGHT GREEN (GaP) | GREEN DIFFUSED | 2.6                | 10   | 40°              |

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

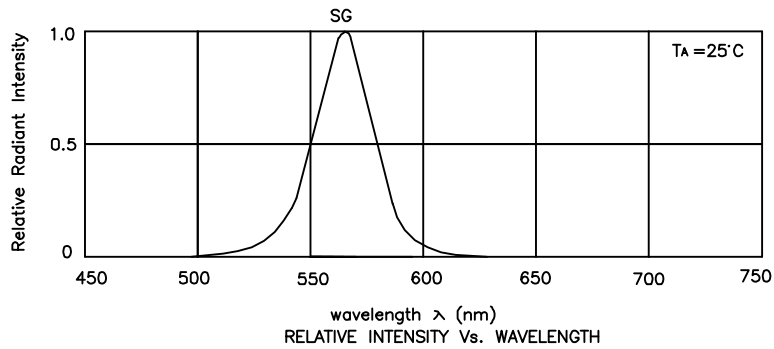
| Symbol            | Parameter                | Device             | Typ. | Max. | Units | Test Conditions           |
|-------------------|--------------------------|--------------------|------|------|-------|---------------------------|
| λ <sub>peak</sub> | Peak Wavelength          | Super Bright Green | 565  |      | nm    | I <sub>F</sub> =20mA      |
| λ <sub>D</sub>    | Dominant Wavelength      | Super Bright Green | 568  |      | nm    | I <sub>F</sub> =20mA      |
| Δλ <sub>1/2</sub> | 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>    | 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       |

## Absolute Maximum Ratings at TA=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     |       |

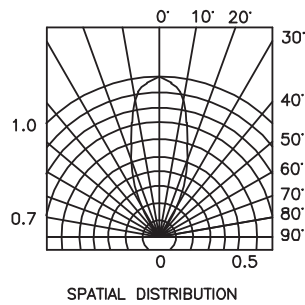
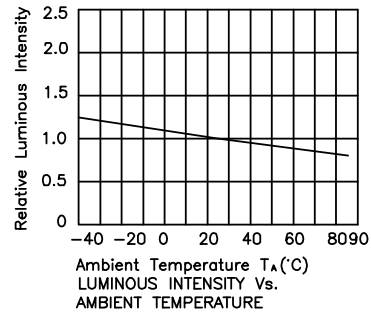
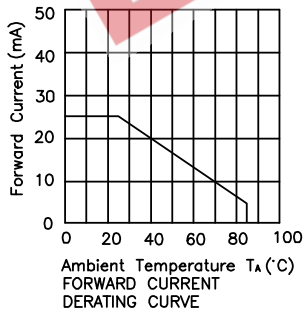
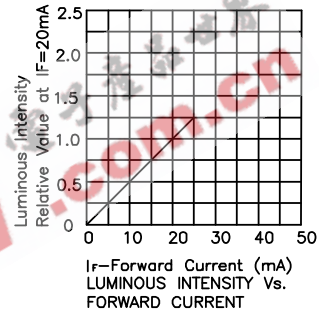
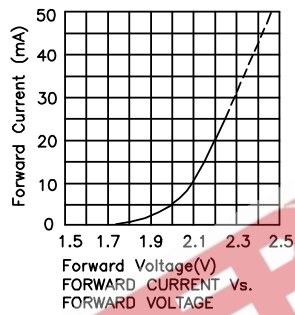
Note:

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



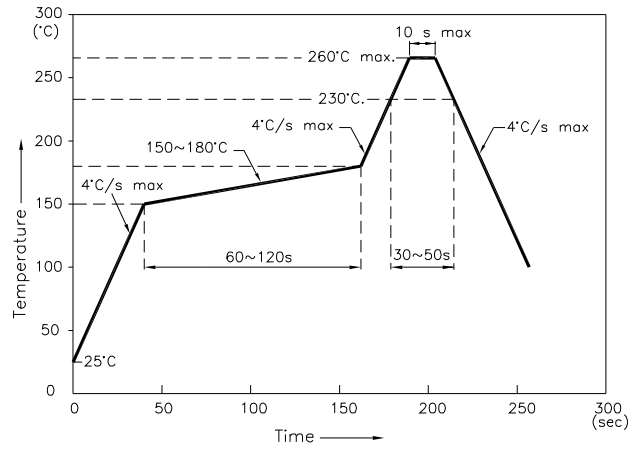
## Super Bright Green

## AM2520SGD03



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Reflow Soldering Profile For Lead-free SMT Process.



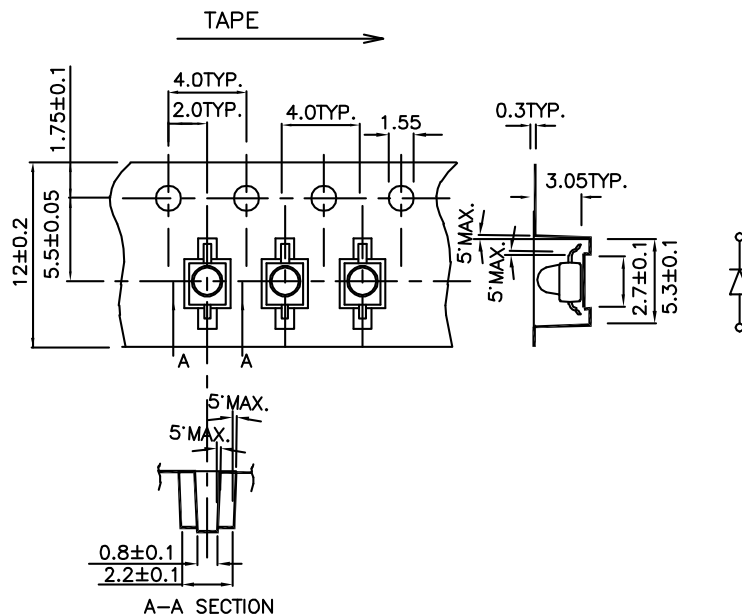
NOTES:

1. We recommend the reflow temperature  $245^{\circ}\text{C} (+/-5^{\circ}\text{C})$ . The maximum soldering temperature should be limited to  $260^{\circ}\text{C}$ .
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)

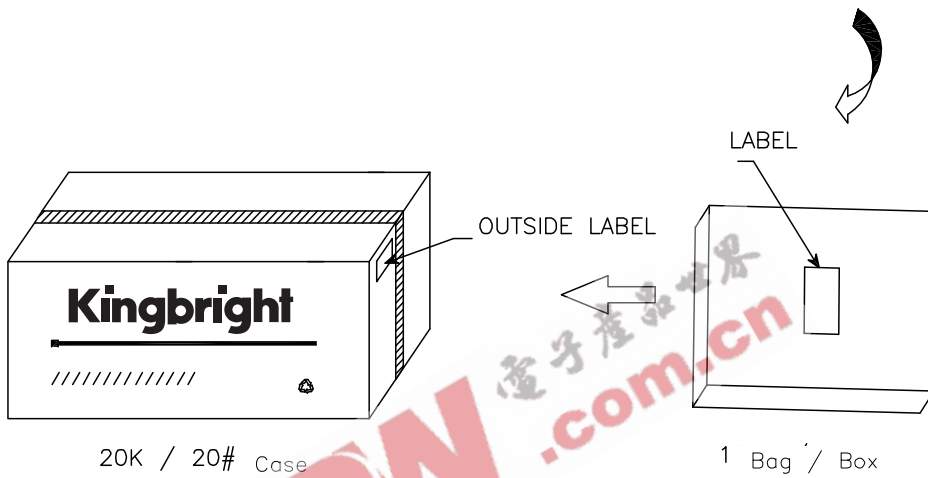
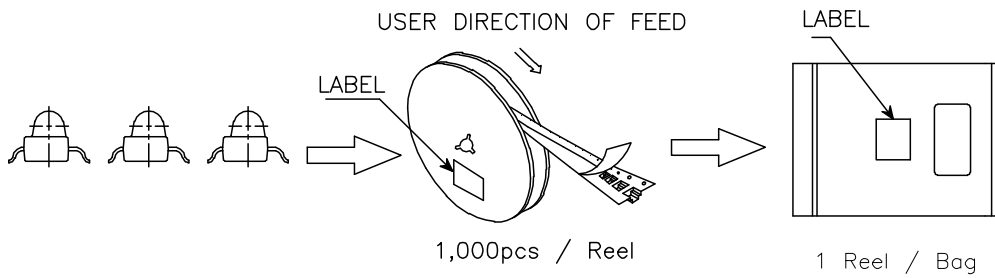



### Tape Specifications (Units : mm)



**PACKING & LABEL SPECIFICATIONS**

**AM2520SGD03**



|  |   |
|--|---|
| <b>Kingbright</b>  |   |
| P/NO: AM2520xxx03  |   |
| QTY: 1.000 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  | Date  |
| CODE: XXX  |   |
| LOT NO:  |   |
| <br><small>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</small> |   |
| RoHS Compliant   |   |

**Remarks:**

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

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

Note: Accuracy may depend on the sorting parameters