

Part Number: APA3010SGC

Super Bright Green

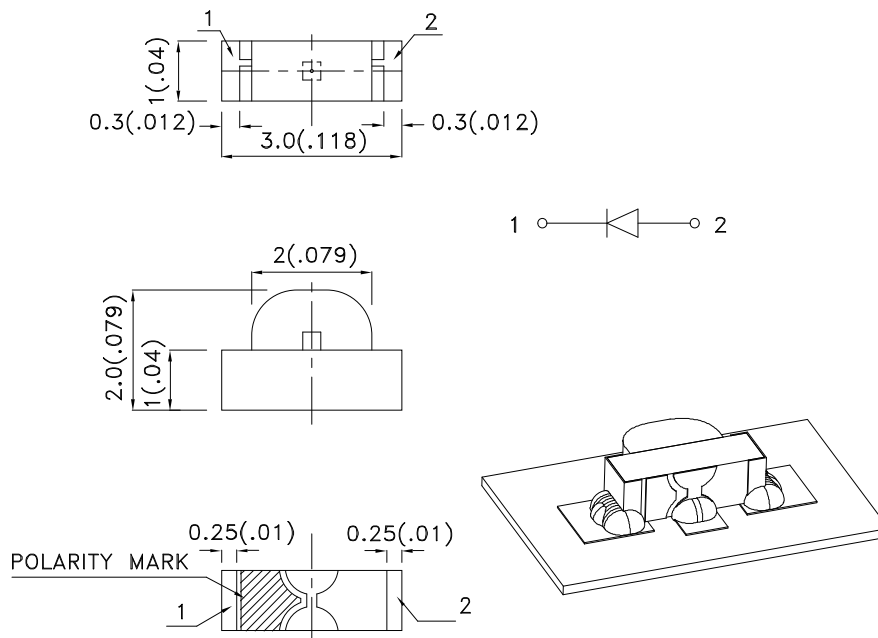
### Features

- 3.0mmx1.0mm RIGHT ANGLE SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACK LIGHT 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.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.15(0.006)$  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]<br>@ 20mA |      | Viewing<br>Angle [1] |
|------------|--------------------------|-------------|------------------------|------|----------------------|
|            |                          |             | Min.                   | Typ. | 2θ1/2                |
| APA3010SGC | Super Bright Green (GaP) | WATER CLEAR | 4                      | 15   | 120°                 |

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           |
|-----------------------|--------------------------|--------------------|------|------|-------|---------------------------|
| $\lambda_{peak}$      | 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:

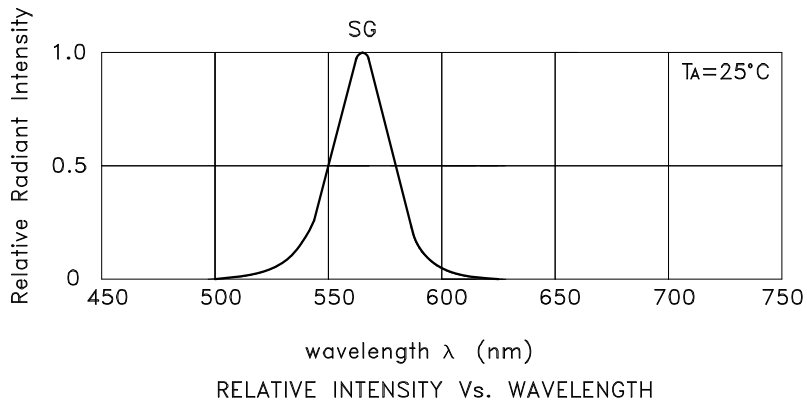
- Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

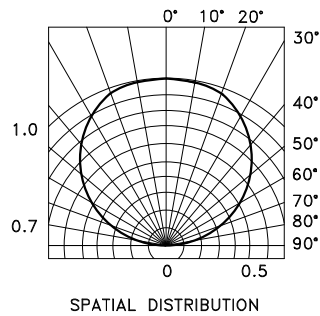
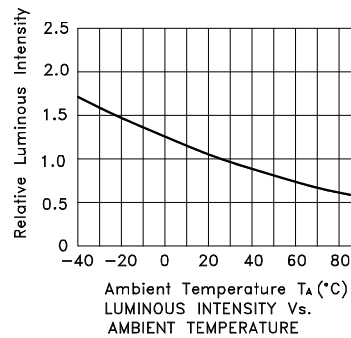
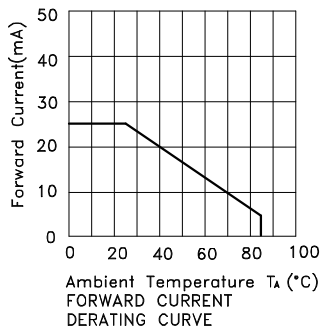
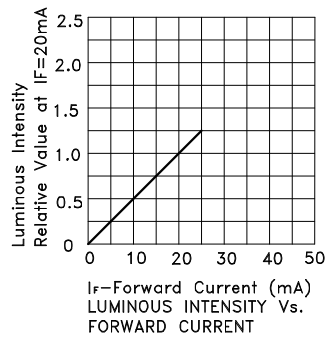
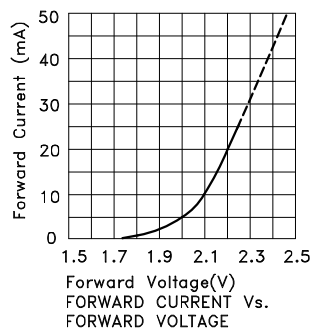
| Parameter                | Super Bright Green | Units |
|--------------------------|--------------------|-------|
| Power dissipation        | 62.5               | mW    |
| DC Forward Current       | 25                 | mA    |
| Peak Forward Current [1] | 140                | mA    |
| Reverse Voltage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

Note:

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

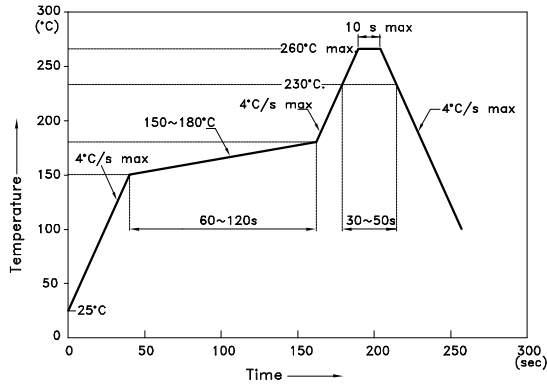


**Super Bright Green      APA3010SGC**



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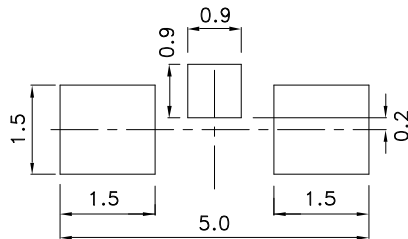
Reflow Soldering Profile For Lead-free SMT Process.



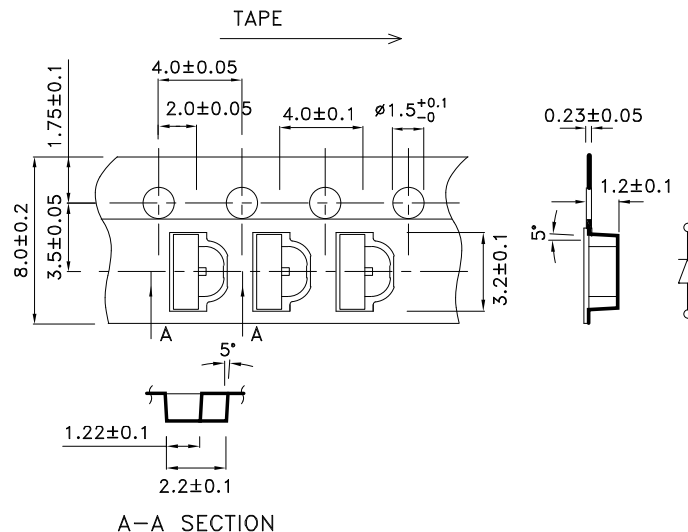
**NOTES:**

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)

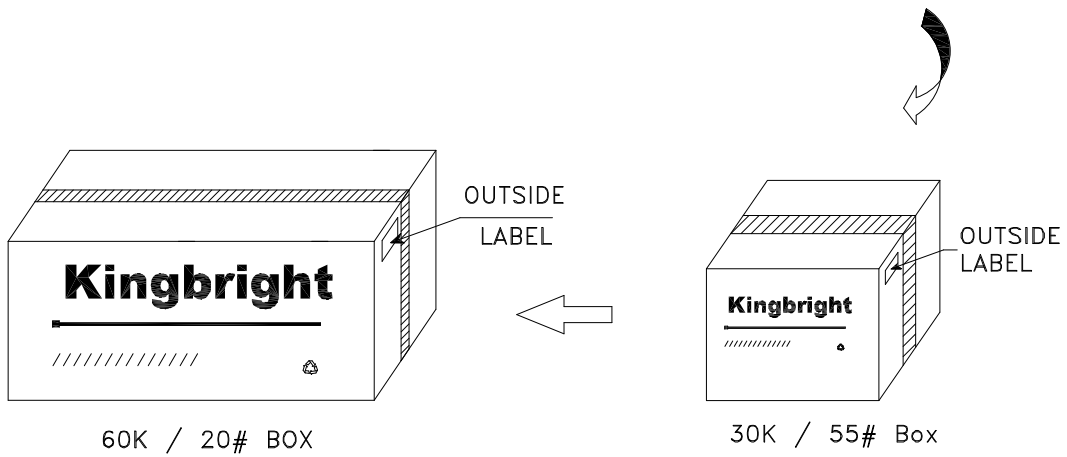
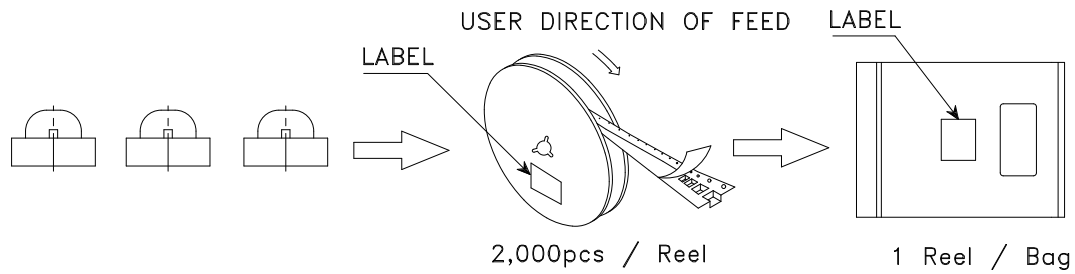


### Tape Specifications (Units : mm)



**PACKING & LABEL SPECIFICATIONS**

**APA3010SGC**



|  |  |
|--|--|
| <h2 style="margin: 0;">Kingbright</h2> |  |
| P/NO: APA3010xxx                       |  |
| QTY: 2,000 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                              |  |
| CODE: XXX                              |  |
| LOT NO:                                |  |
| <br>xxxxxxxxxxxxxxxxxxxxxxxx           |  |
| RoHS Compliant                         |  |