

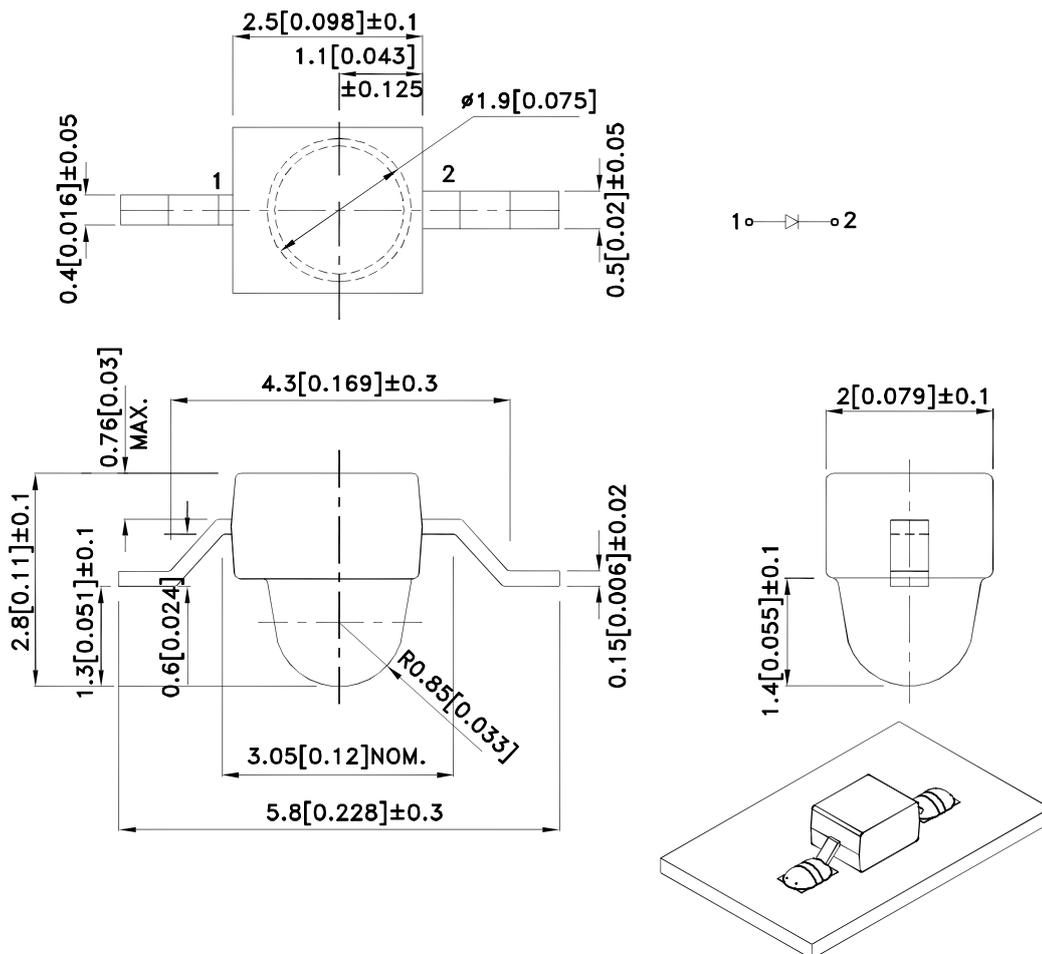
Features

- Subminiature package.
- Z-bend lead.
- Long life - solid state reliability.
- Low package profile.
- Moisture sensitivity level : level 3.
- 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. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
5. 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 |
| AM2520SGC09 | Super Bright Green (GaP) | Water Clear | 40 | 90 | 20° |

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.
3. Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

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

Notes:

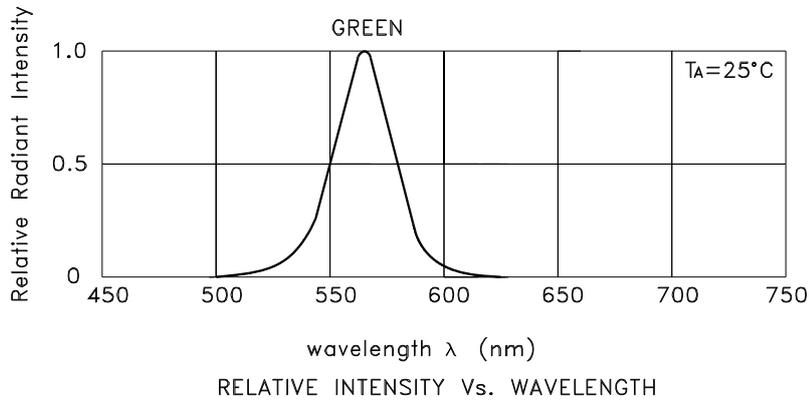
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

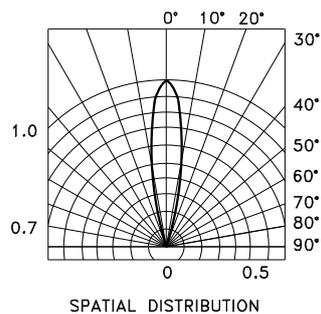
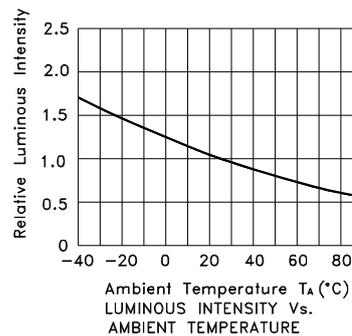
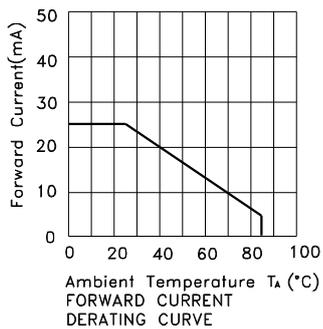
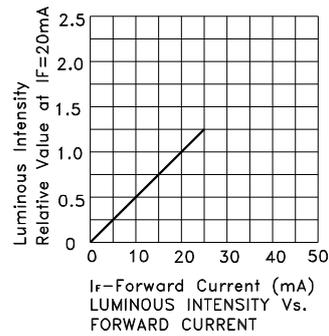
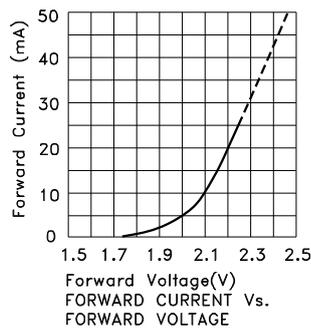
| Parameter | Super Bright Green | Units |
|--------------------------|--------------------|-------|
| Power dissipation | 62.5 | mW |
| DC Forward Current | 25 | mA |
| Peak Forward Current [1] | 140 | mA |
| Reverse Voltage | 5 | V |
| Operating Temperature | -40°C To +85°C | |
| Storage Temperature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

Note:

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



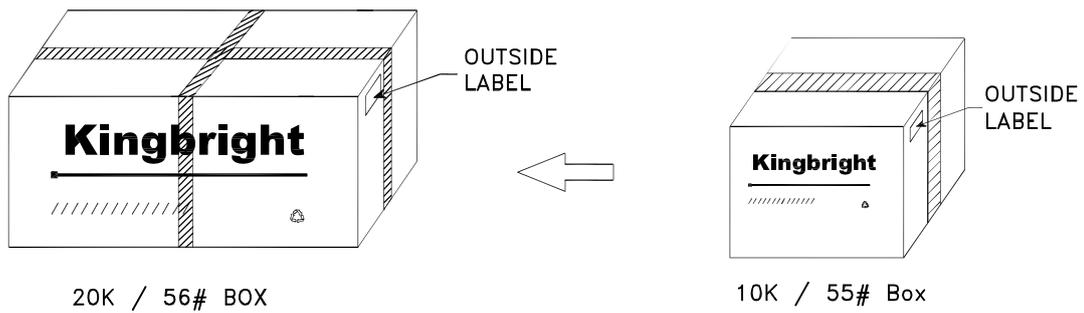
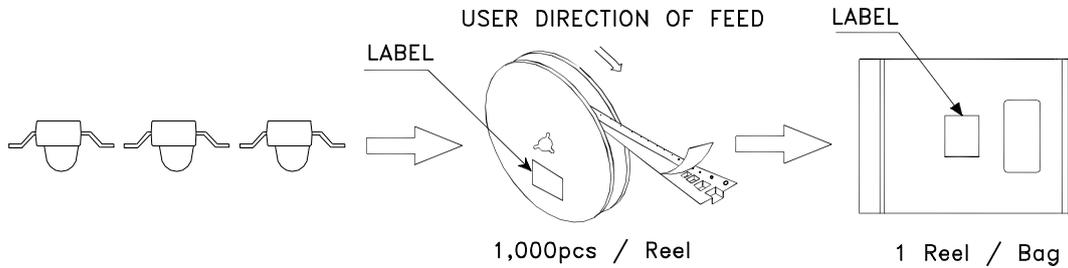
Super Bright Green AM2520SGC09



Kingbright

PACKING & LABEL SPECIFICATIONS

AM2520SGC09



| | | | | |
|---|---|-----|------------|--------|
| <h1 style="margin: 0;">Kingbright</h1> | | | | |
| P/N0: AM2520xxx09 | | | | |
| QTY: 1,000 pcs | Q.C. | | | |
| S/N: XXXX | <table border="1" style="margin: auto; border-radius: 50%; padding: 5px;"> <tr> <td style="text-align: center;">Q C</td> </tr> <tr> <td style="text-align: center;">XX XX XXXX</td> </tr> <tr> <td style="text-align: center;">PASSED</td> </tr> </table> | Q C | XX XX XXXX | PASSED |
| Q C | | | | |
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| PASSED | | | | |
| CODE: XXX | | | | |
| LOT NO: | | | | |
| | | | | |
| <small>XXXXXXXXXXXXXXXXXXXXXXXXXXXX</small> RoHS Compliant | | | | |

All design applications should refer to Kingbright application notes available at <http://www.KingbrightUSA.com/ApplicationNotes>