

KM-27SGD-09

SUPER BRIGHT GREEN

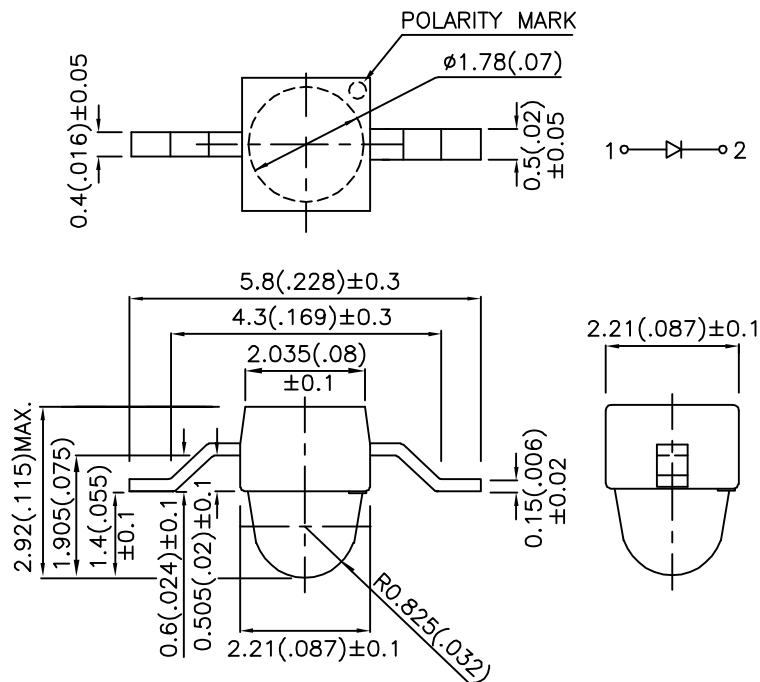
Features

- SUBMINIATURE PACKAGE.
- WIDE VIEWING ANGLE.
- Z-BEND 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) @ 20mA | | Viewing Angle |
|-------------|--------------------------|----------------|--------------------|------|------------------|
| | | | Min. | Typ. | 2 θ 1/2 |
| KM-27SGD-09 | SUPER BRIGHT GREEN (GaP) | GREEN DIFFUSED | 2.6 | 10 | 40° |

Note:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

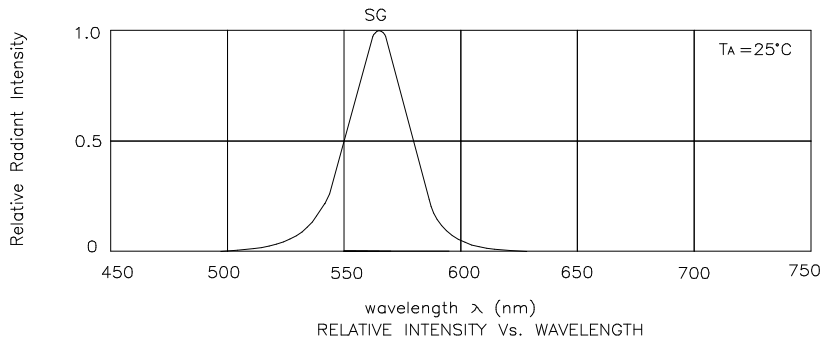
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|--------------------|------|------|-------|-----------------|
| λ_{peak} | Peak Wavelength | Super Bright Green | 565 | | nm | IF=20mA |
| λ_D | Dominant Wavelength | Super Bright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

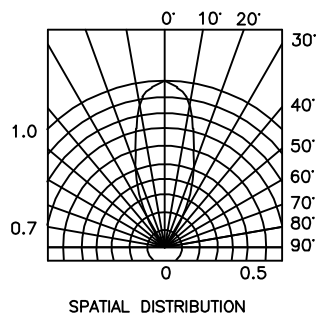
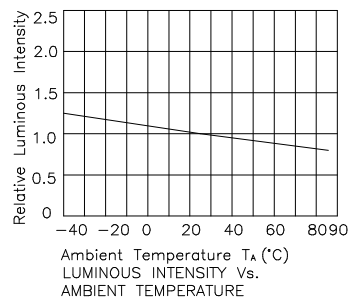
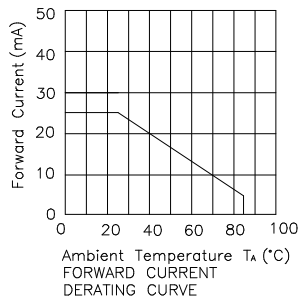
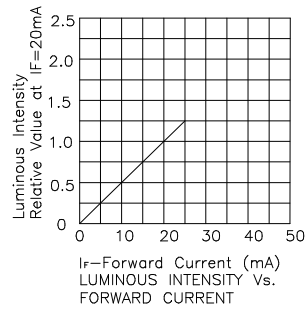
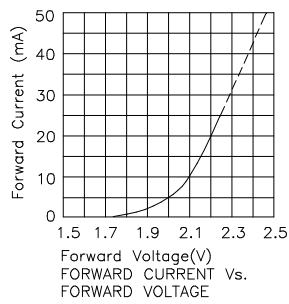
Note:

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



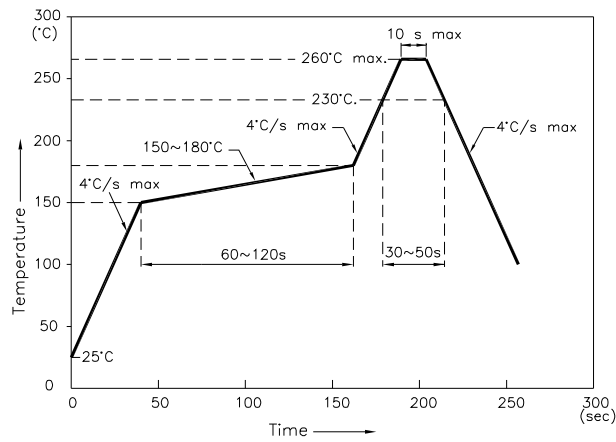
Super Bright Green

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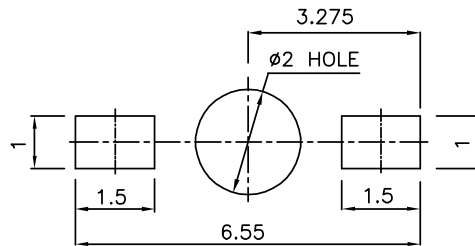
Reflow Soldering Profile For Lead-free SMT Process.



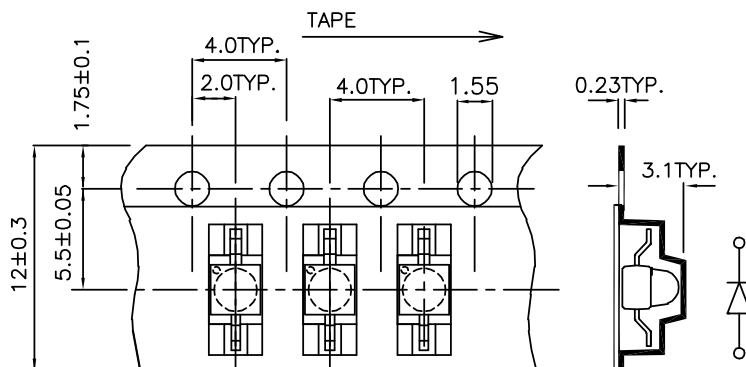
NOTES:

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)



Tape Specifications (Units : mm)



Remarks:

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

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

Note: Accuracy may depend on the sorting parameters.