

SUBMINIATURE SOLID STATE LAMP

KM-27SGC-08

SUPER BRIGHT GREEN

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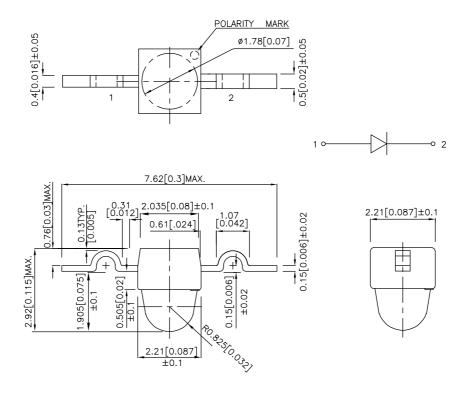
Features

- •SUBMINIATURE PACKAGE.
- •WIDE VIEWING ANGLE.
- •YOKE 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 ±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.

SPEC NO: DSAD0303 REV NO: V.5 DATE: MAR/22/2005
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Selection Guide

| Part No. | Dice | Lens Type | lv (mcd) @ 20mA | | Viewing Angle |
|-------------|--------------------------|-------------|--------------------|------|------------------|
| | | | Min. | Тур. | 201/2 |
| KM-27SGC-08 | SUPER BRIGHT GREEN (GaP) | WATER CLEAR | 36 | 80 | 20° |

Note:

Electrical / Optical Characteristics at Ta=25°C

| Symbol | Parameter | Device | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|--------------------|------|------|-------|-----------------|
| λpeak | Peak Wavelength | Super Bright Green | 565 | | nm | IF=20mA |
| λD | Dominant Wavelength | Super Bright Green | 568 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Super Bright Green | 30 | | nm | IF=20mA |
| С | Capacitance | Super Bright Green | 15 | | pF | VF=0V;f=1MHz |
| VF | Forward Voltage | Super Bright Green | 2.2 | 2.5 | V | IF=20mA |
| lR | 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 | • |

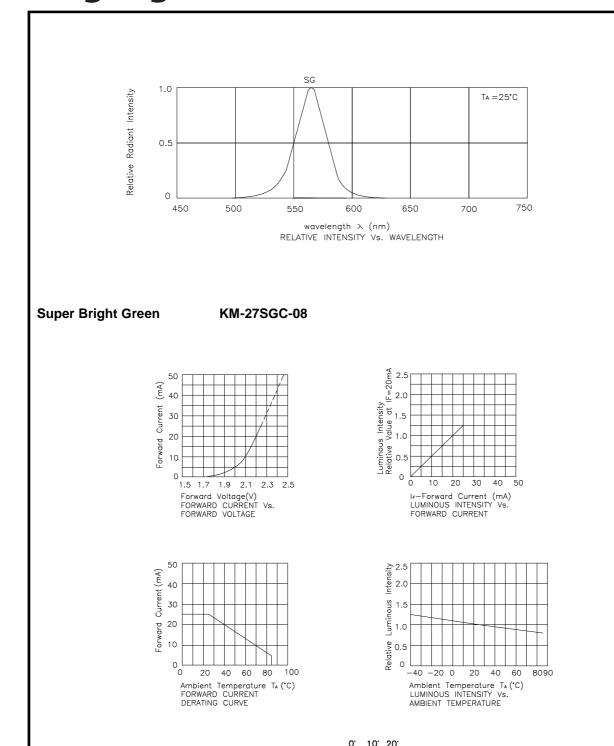
Note:

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

^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

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30 40° 50 60. 70 80 0.7 90 SPATIAL DISTRIBUTION

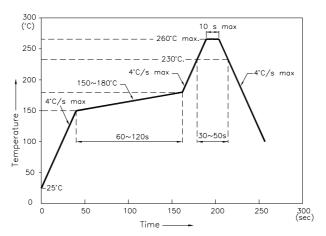
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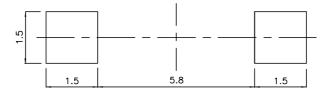
Reflow Soldering Profile For Lead-free SMT Process.



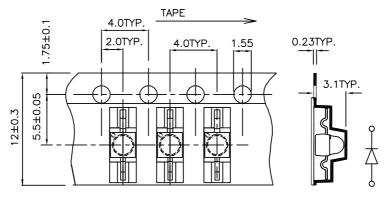
NOTES:

- 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.

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