

Part Number: AM23SGD-F

Super Bright Green

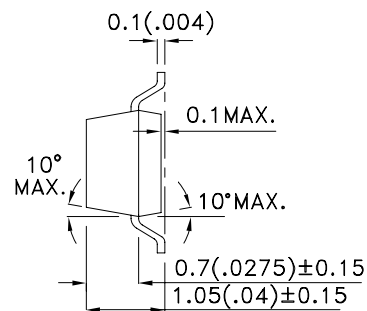
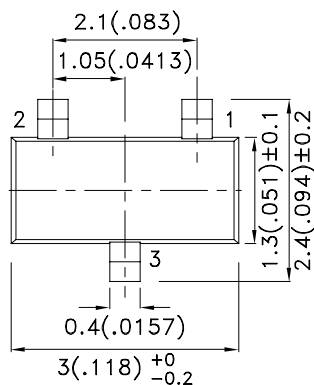
Features

- SOT-23 PACKAGE SURFACE MOUNT LED LAMP.
- LOW POWER CONSUMPTION.
- LONG LIFE - SOLID STATE RELIABILITY.
- PACKAGE: 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

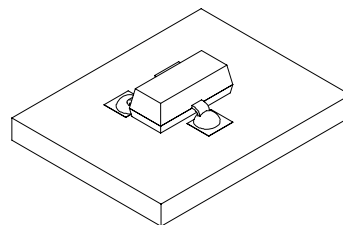
Description

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions



- 1 ANODE
- 2 N.C.
- 3 CATHODE



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 lead emerge from the package.
4. Specifications are subject to change without 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 |
| AM23SGD-F | Super Bright Green (GaP) | GREEN DIFFUSED | 2.6 | 8 | 140° |

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|--------|--------------------------|--------------------|------|------|-------|-----------------|
| λpeak | Peak Wavelength | Super Bright Green | 565 | | nm | IF=20mA |
| λD [1] | Dominant Wavelength | Super Bright Green | 568 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Half-width | Super Bright Green | 30 | | nm | IF=20mA |
| C | Capacitance | Super Bright Green | 15 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Super Bright Green | 2.2 | 2.5 | V | IF=20mA |
| IR | Reverse Current | Super Bright Green | | 10 | uA | VR=5V |

Notes:

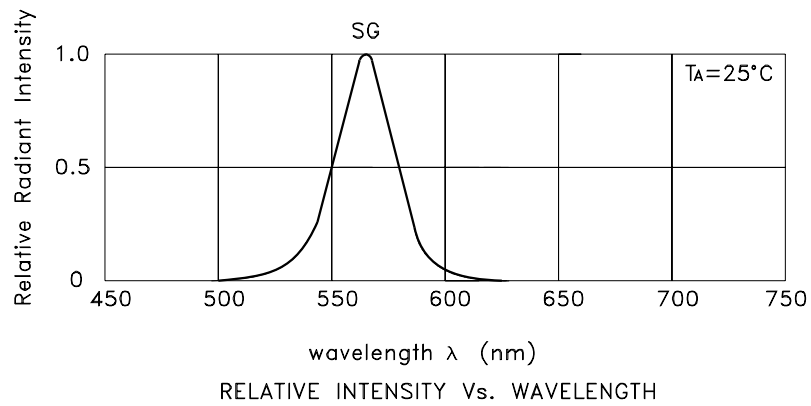
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

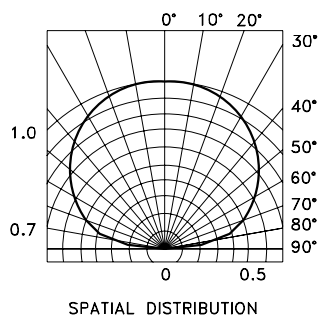
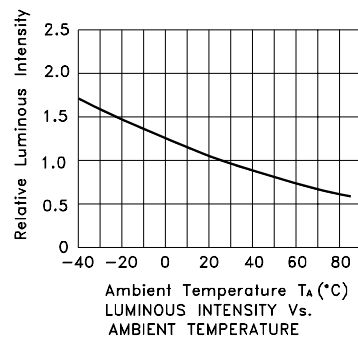
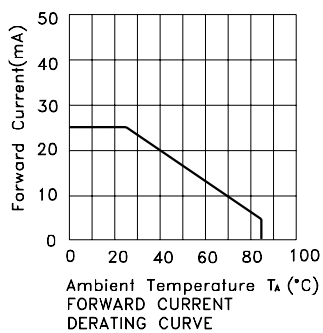
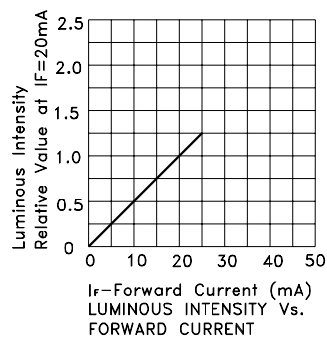
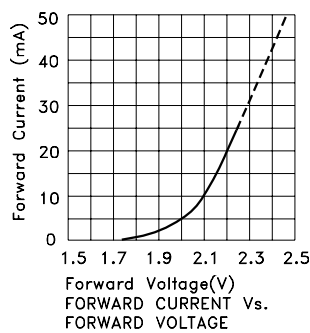
| Parameter | Super Bright Green | Units |
|--------------------------|--------------------|-------|
| Power dissipation | 62.5 | mW |
| DC Forward Current | 25 | mA |
| Peak Forward Current [1] | 140 | mA |
| Reverse Voltage | 5 | V |
| Operating Temperature | -40°C To +85°C | |
| Storage Temperature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

Note:

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

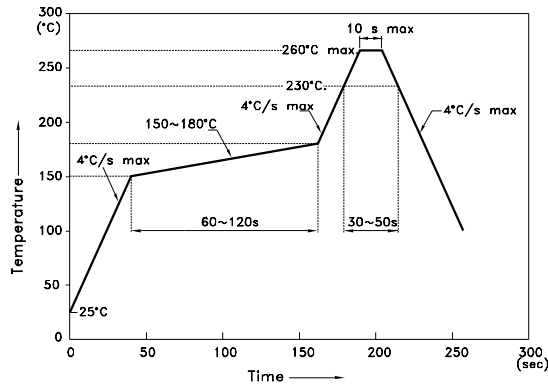


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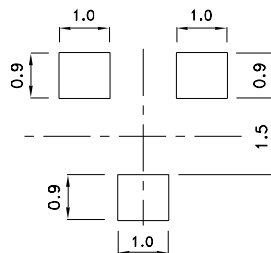
Reflow Soldering Profile For Lead-free SMT Process.



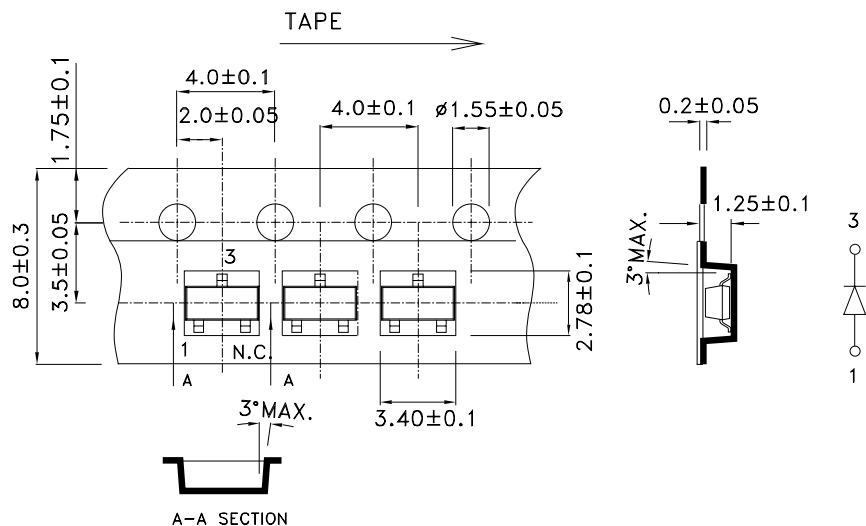
NOTES:

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)

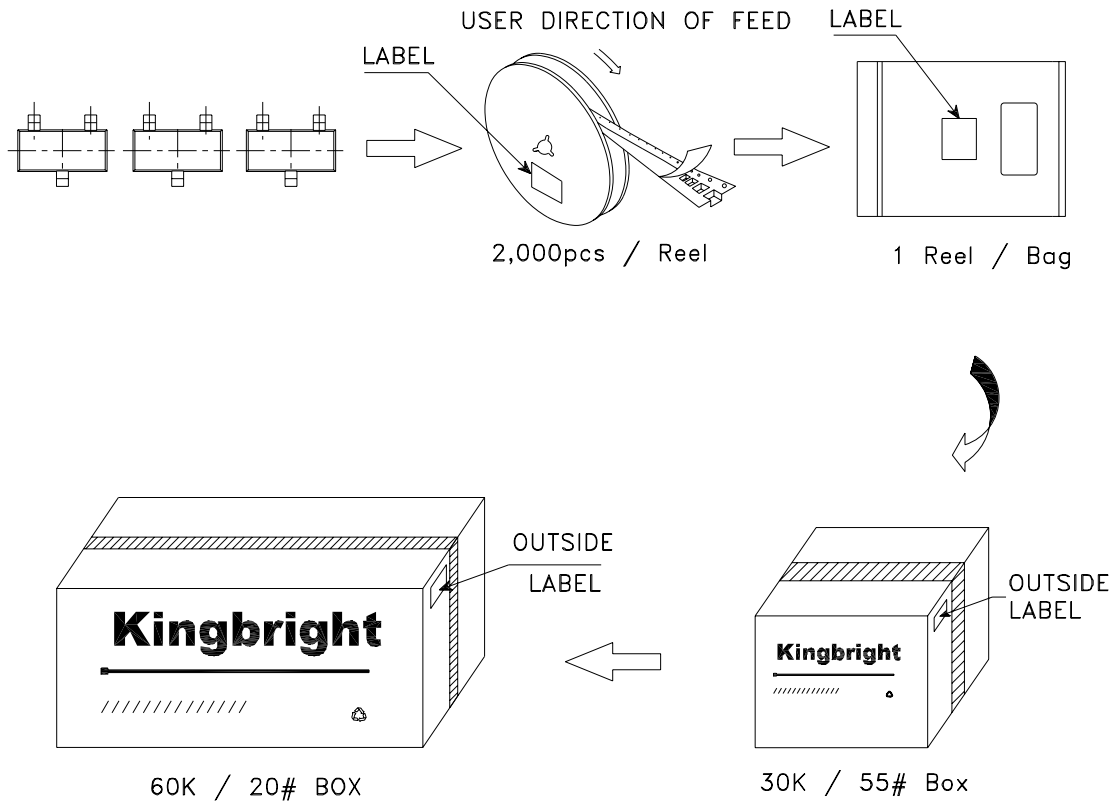



Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

AM23SGD-F



| | |
|--|---|
| Kingbright | |
| P/NO: AM23xxx | |
| QTY: 2,000 pcs | Q.C. <div>Q C xx xx xxxx PASSED</div> |
| S/N: XXXX | |
| CODE: XXX | |
| LOT NO: | |
|  xxxxxxxxxxxxxxxxxxxxxxxxxxxx | |
| RoHS Compliant | |