

SUBMINIATURE SOLID STATE LAMP

KM-27SGD-03

SUPER BRIGHT GREEN

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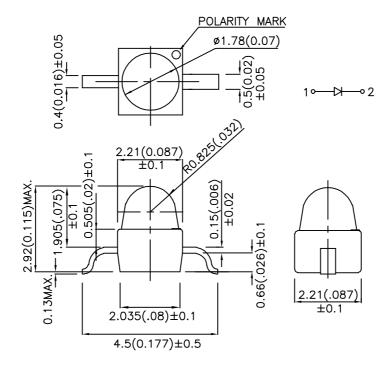
Features

- •SUBMINIATURE PACKAGE.
- •GULL WING.
- •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.
- $\ensuremath{\mathsf{3}}.$ Lead spacing is measured where the leads emerge from the package.
- 4. Specifications are subject to change without notice.

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APPROVED: J. Lu CHECKED: Allen Liu DRAWN: Y.W.WANG

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Selection Guide

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	201/2
KM-27SGD-03	SUPER BRIGHT GREEN (GaP)	GREEN DIFFUSED	2.6	10	40°

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	•

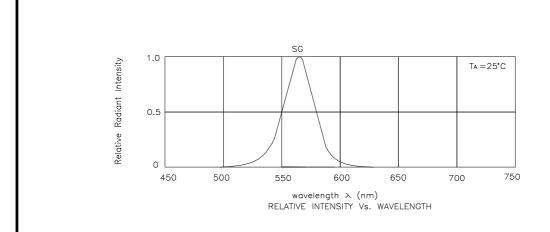
Note

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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.

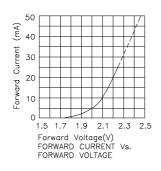
^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

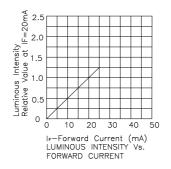
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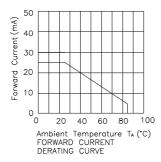


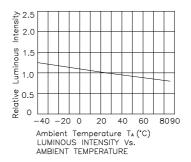
Super Bright Green

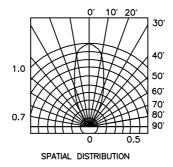
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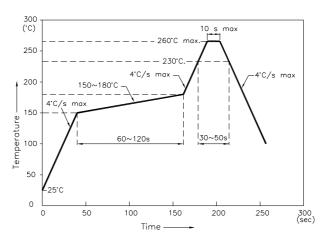
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Reflow Soldering Profile For Lead-free SMT Process.



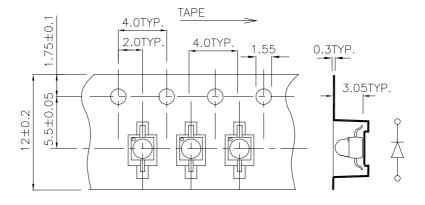
NOTES:

- 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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