

#### SUBMINIATURE SOLID STATE LAMP

AM27SGD08 SUPER BRIGHT GREEN

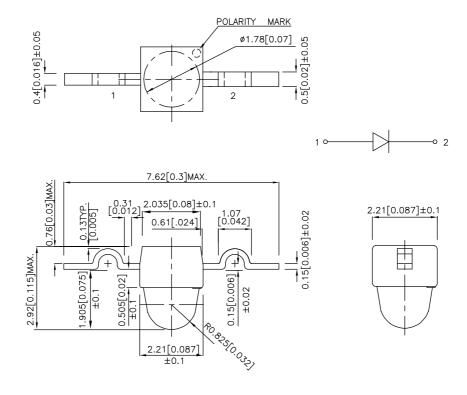
#### **Features**

- •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**



- 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.

SPEC NO: DSAD1320 **REV NO: V.2** CHECKED: Allen Liu APPROVED: J. Lu

DATE: MAR/09/2005 DRAWN: S.H.CHEN PAGE: 1 OF 4 ERP:1202000359

# **Kingbright**

#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	201/2
AM27SGD08	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	ture -40°C To +85°C		

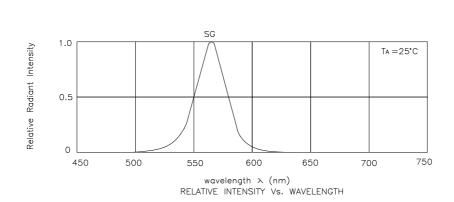
#### Note:

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

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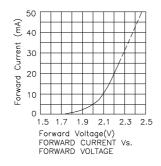
 $<sup>1.\,\</sup>theta1/2$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

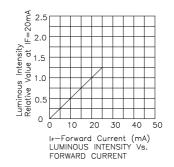
# **Kingbright**

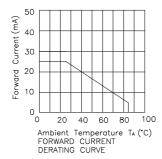


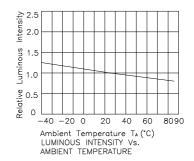
**Super Bright Green** 

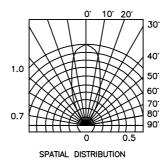
AM27SGD08









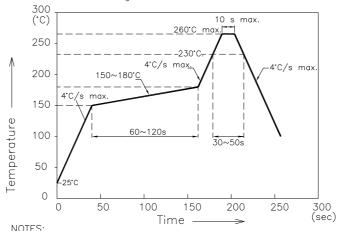


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#### AM27SGD08

Reflow Soldering Profile For Lead-free SMT Process.

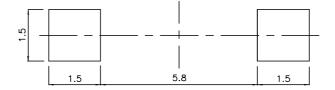


- NOTES:

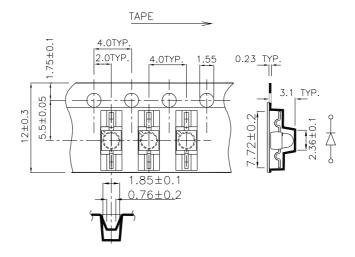
  1.We recommend the reflow temperature 245°C(±5°C).The maximum soldering temperature should be limited to 260°C.

  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 there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

- 1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
- 2.Luminous intensity: +/-15% (Test condition is based on the sorting standard).
- 3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).

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