

3.0x2.2mm SINGLE COLOR SURFACE MOUNT LED LAMP

Part Number: AA3022SGC-4.5SF

Super Bright Green

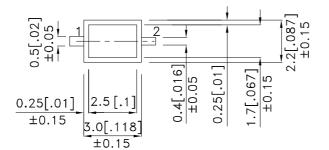
Features

- 3.0mm x 2.2mm SMT LED,1.5mm THICKNESS.
- ULTRA-COMPACT TYPE ASSURES SPACE SAVING.
- HIGH EFFICIENCY & LOW POWER CONSUMPTION.
- PACKAGE: 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL: LEVEL 4.
- RoHS COMPLIANT.

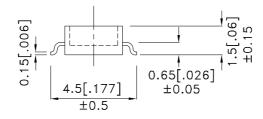
Description

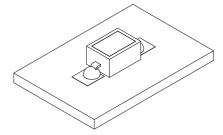
The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions









Notes:

- 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.
- 5. The device has a single mounting surface. The device must be mounted according to the specifications.





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 REV NO: V.4
 DATE: MAY/08/2007
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 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: Y.L.LI
 ERP: 1201000209

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
AA3022SGC-4.5SF	Super Bright Green (GaP)	WATER CLEAR	7	20	90°

- 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	Тур.	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
С	Capacitance	Super Bright Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Green	2.2	2.5	V	IF=20mA
lr	Reverse Current	Super Bright Green		10	uA	VR=5V

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

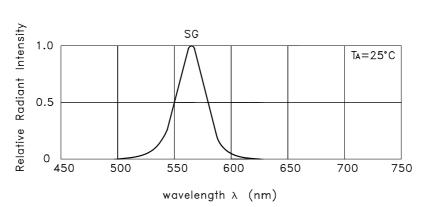
Absolute Maximum Ratings at TA=25°C

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.

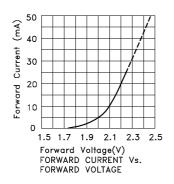
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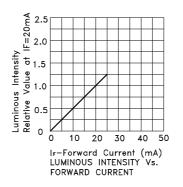


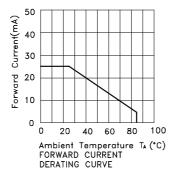
RELATIVE INTENSITY Vs. WAVELENGTH

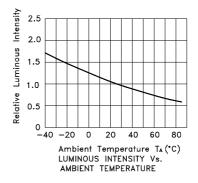
Super Bright Green

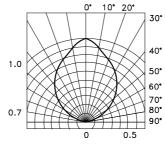
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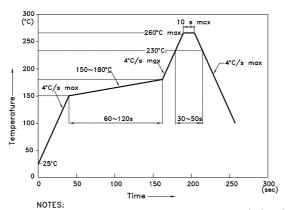
SPATIAL DISTRIBUTION

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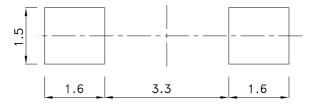
Reflow Soldering Profile For Lead-free SMT Process.



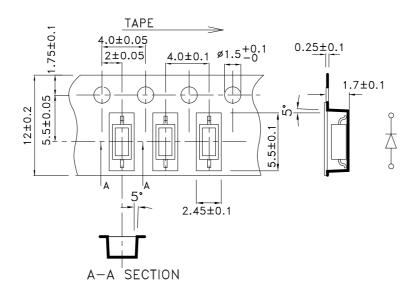
- NOTES:

 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.

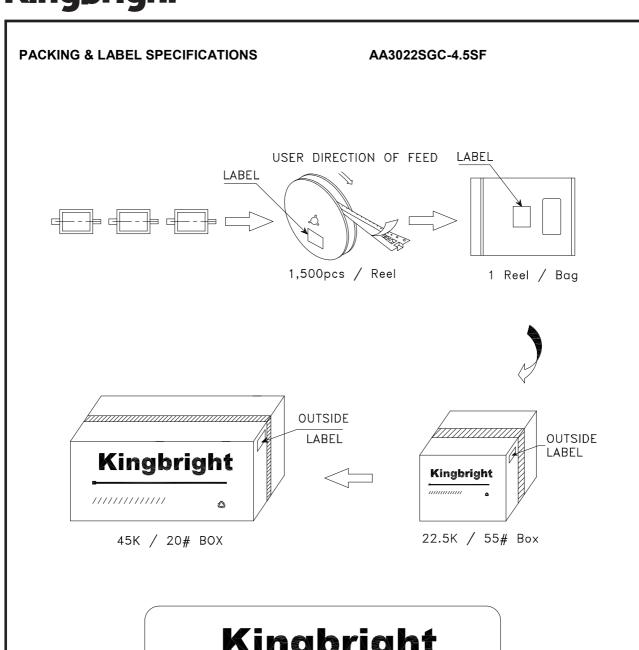
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Tape Specifications (Units: mm)



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