

Part Number: AA3022SGC-4.5SF

Super Bright Green

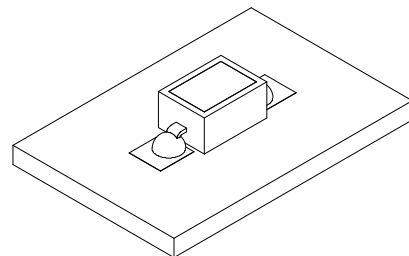
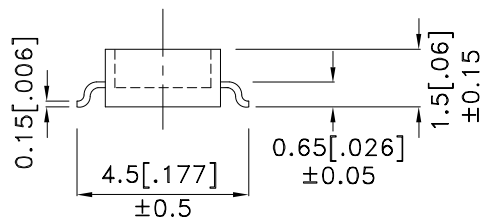
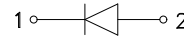
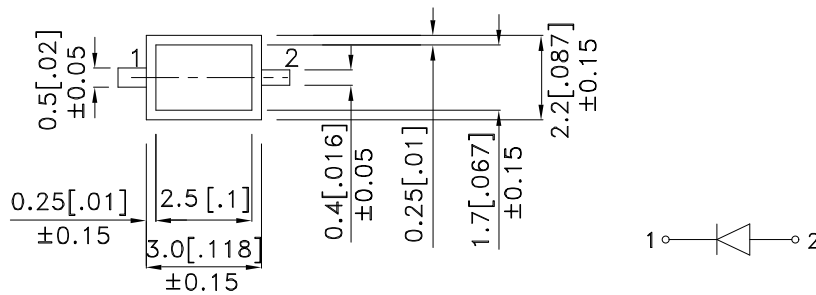
Features

- 3.0mm x 2.2mm SMT LED, 1.5mm thickness.
- White reflector to maximize reflection of light.
- Ultra-compact type assures space saving.
- High efficiency & low power consumption.
- 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:

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 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.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
AA3022SGC-4.5SF	Super Bright Green (GaP)	WATER CLEAR	7	20	90°

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
λ _{peak}	Peak Wavelength	Super Bright Green	565		nm	I _F =20mA
λ _D [1]	Dominant Wavelength	Super Bright Green	568		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Super Bright Green	30		nm	I _F =20mA
C	Capacitance	Super Bright Green	15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Super Bright Green	2.2	2.5	V	I _F =20mA
I _R	Reverse Current	Super Bright Green		10	μA	V _R =5V

Notes:

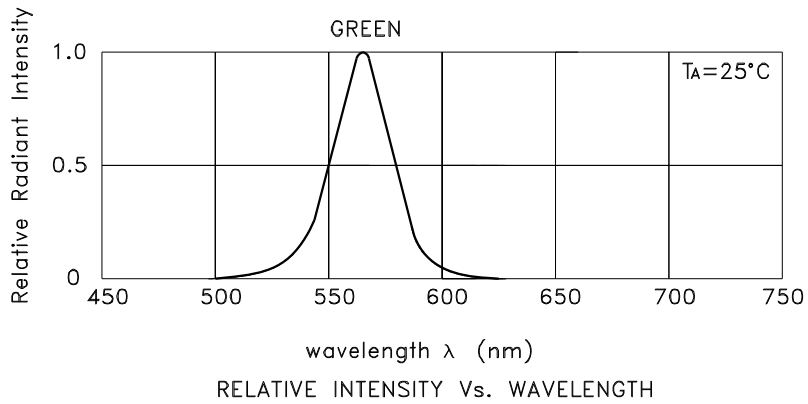
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

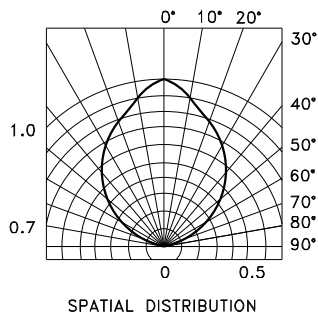
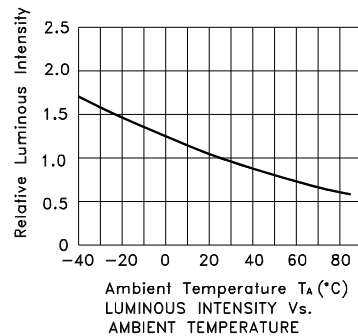
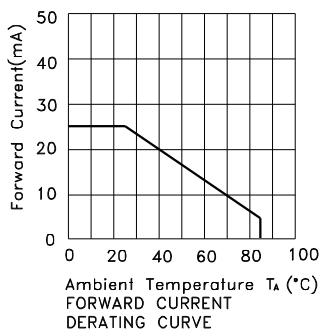
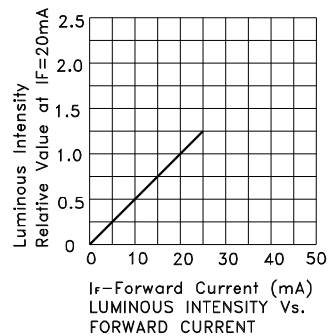
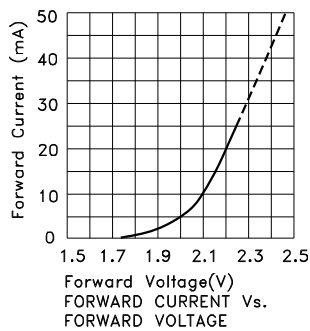
Parameter	Super Bright Green	Units
Power dissipation	62.5	mW
DC Forward Current	25	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

Note:

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



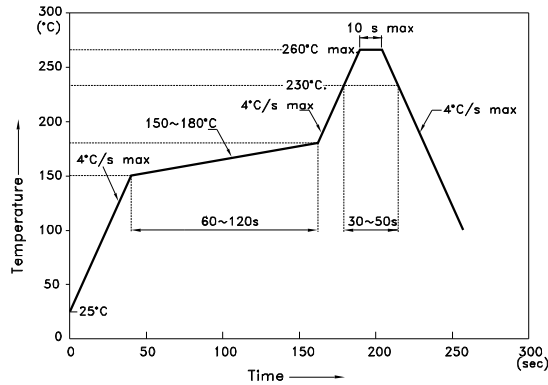
Super Bright Green AA3022SGC-4.5SF



AA3022SGC-4.5SF

Reflow soldering is recommended and the soldering profile is shown below.
Other soldering methods are not recommended as they might cause damage to the product.

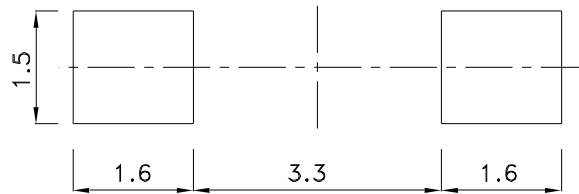
Reflow Soldering Profile For Lead-free SMT Process.



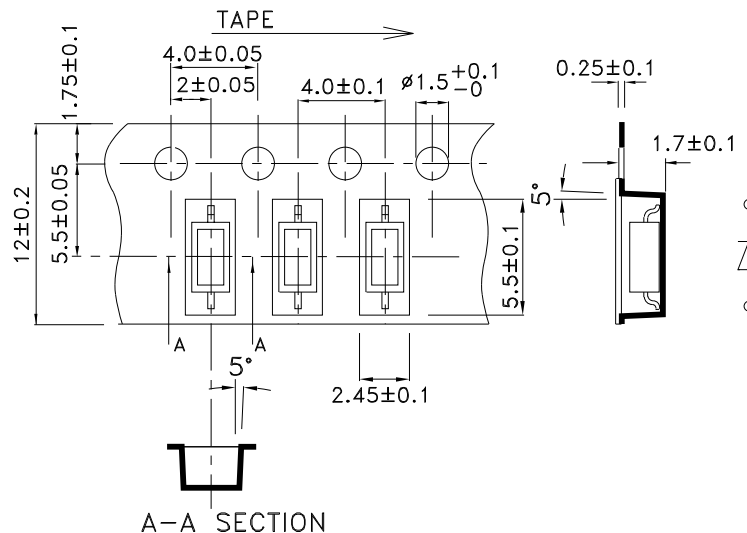
NOTES:

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)



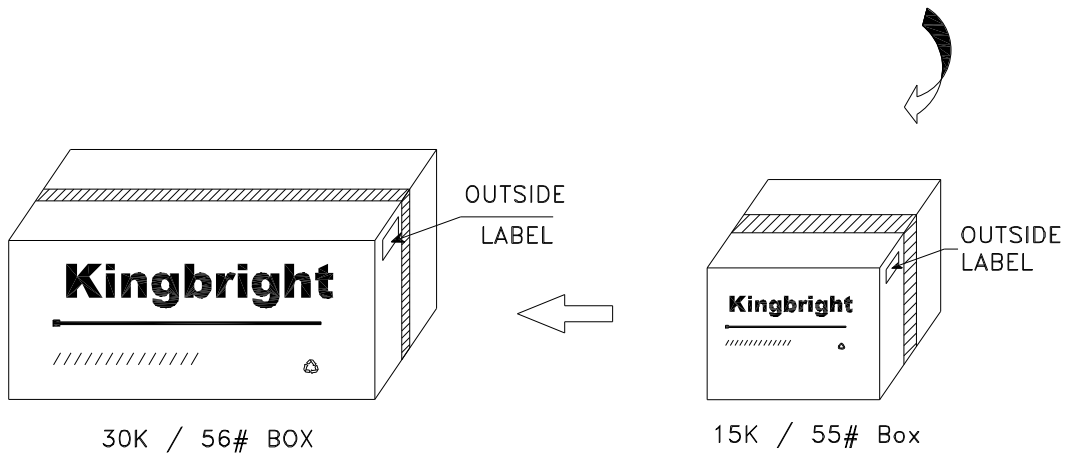
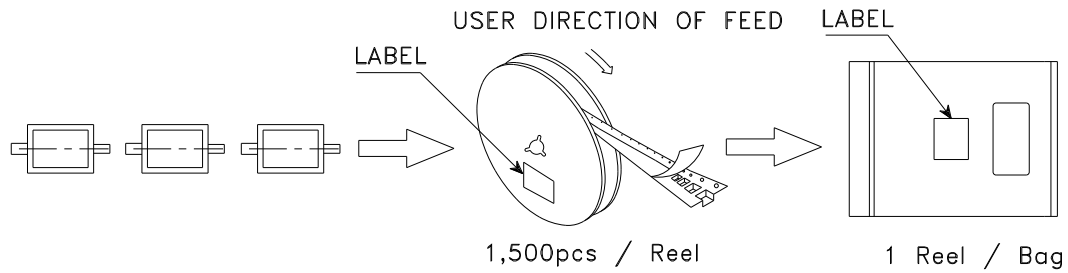
Tape Dimensions (Units : mm)




Kingbright

PACKING & LABEL SPECIFICATIONS

AA3022SGC-4.5SF



<h1>Kingbright</h1>	
P/NO: AA3022xxx	
QTY: 1,500 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	