

Part Number: AA3022SRC-4.5SF

Super Bright Red

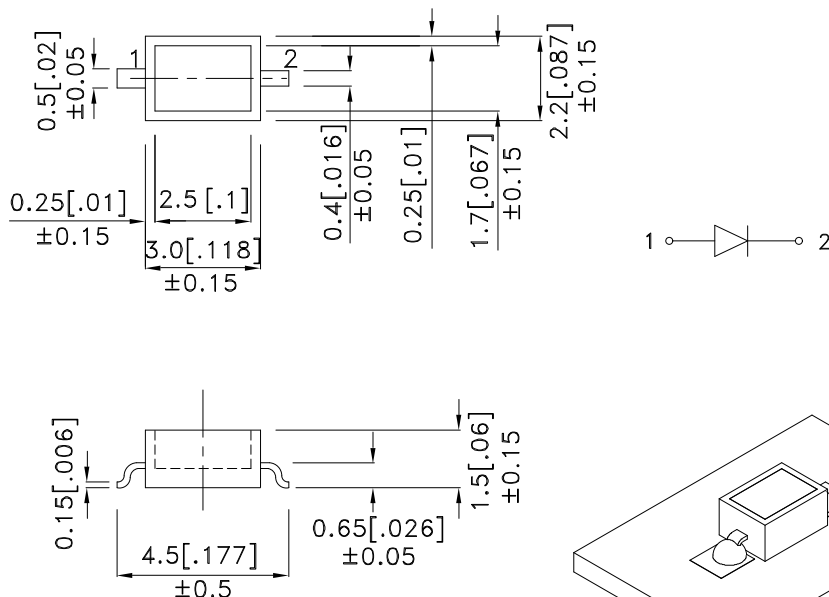
Features

- 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 Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 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
AA3022SRC-4.5SF	Super Bright Red (GaAlAs)	WATER CLEAR	36	150	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 Red	660		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Super Bright Red	640		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Super Bright Red	20		nm	I _F =20mA
C	Capacitance	Super Bright Red	45		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Super Bright Red	1.85	2.5	V	I _F =20mA
I _R	Reverse Current	Super Bright Red		10	uA	V _R =5V

Notes:

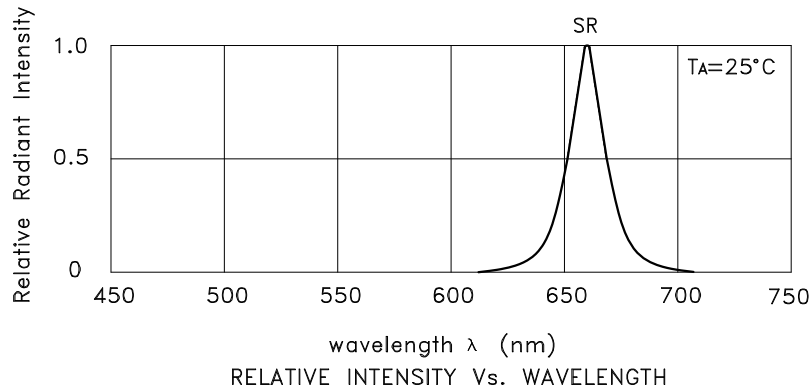
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

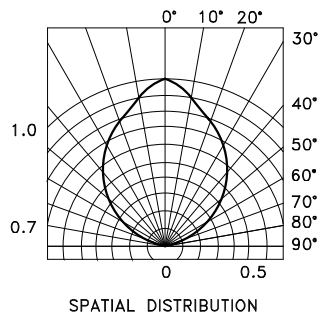
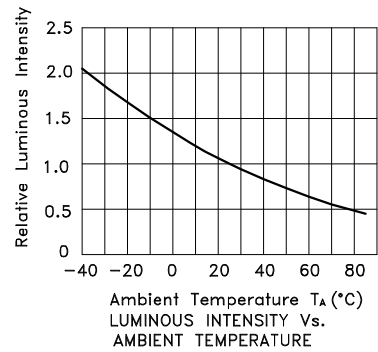
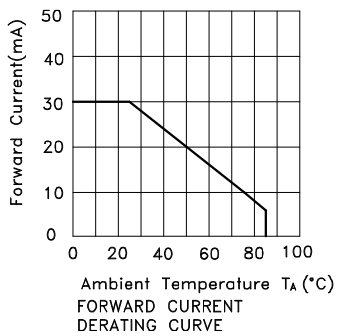
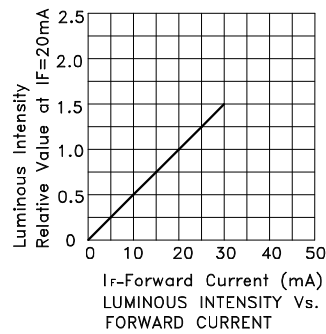
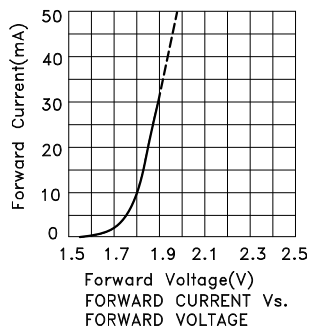
Parameter	Super Bright Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	155	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

Note:

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

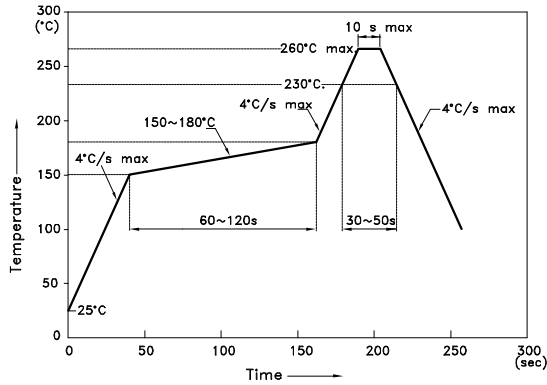


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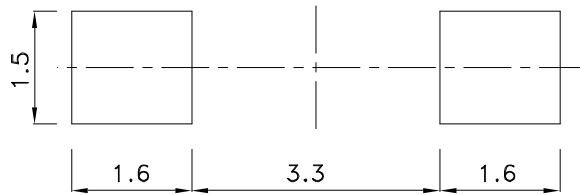
Reflow Soldering Profile For Lead-free SMT Process.



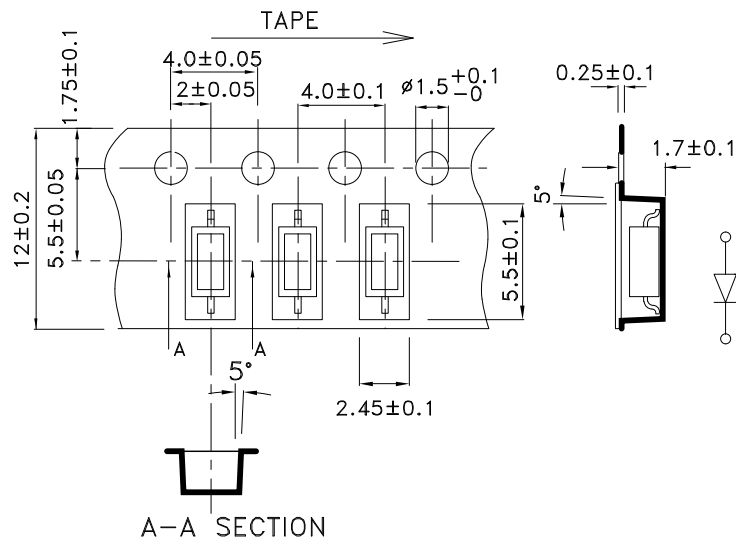
NOTES:

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)



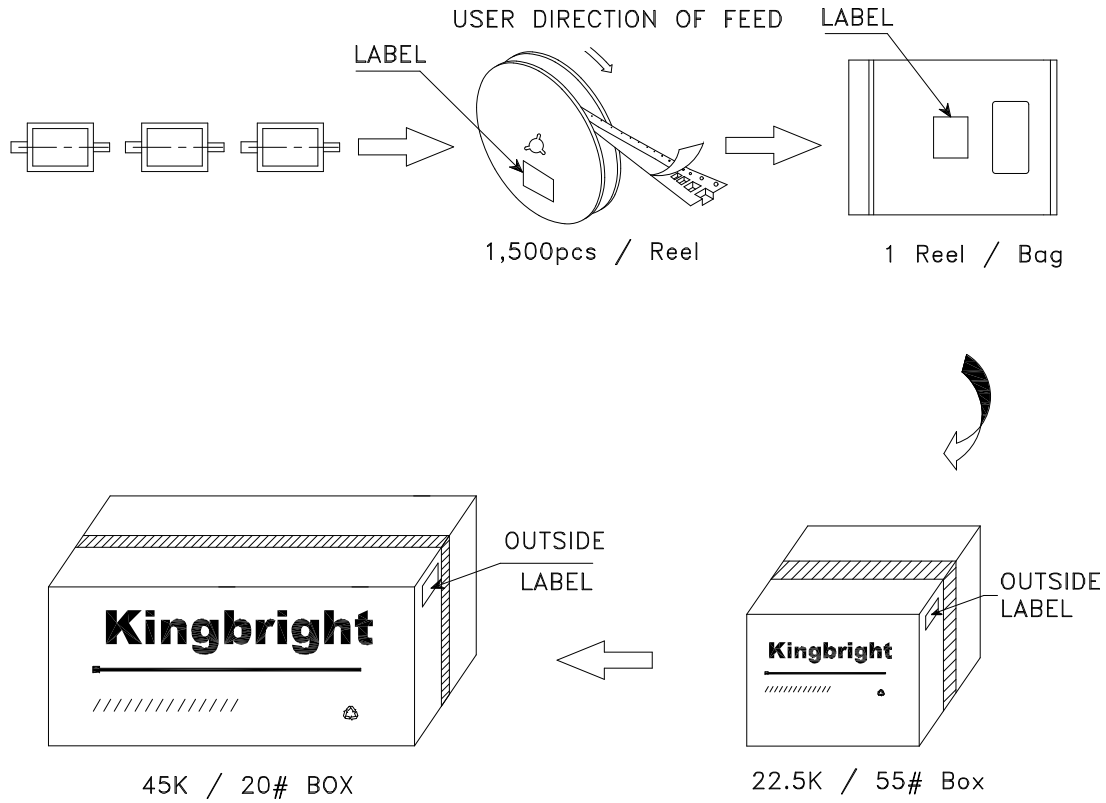
Tape Specifications (Units : mm)




Kingbright

PACKING & LABEL SPECIFICATIONS

AA3022SRC-4.5SF



<h1>Kingbright</h1>	
P/NO: AA3022xxx-4.5SF	
QTY: 1,500 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
	
MADE IN CHINA	RoHS Compliant