

4.0x4.0mm RIGHT ANGLE SURFACE MOUNT **LED LAMP**

Part Number: AA4040SRC Super Bright Red

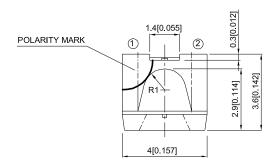
Features

- Single color.
- Suitable for all SMD assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package: 500pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

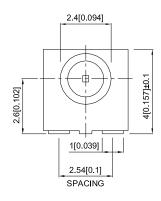
Description

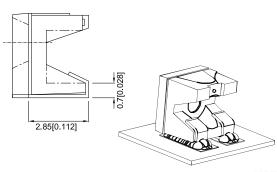
The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

Package Dimensions













- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
 The device has a single mounting surface. The device must be mounted according to the specifications.

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Selection Guide

Part No.	Emitting Color (Material)	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		,,	Min.	Тур.	201/2
AA4040SRC	Super Bright Red (GaAlAs)	Water Clear	80	200	120°
AA4U4USRC		Water Clear	*20	*60	

Notes:

- 1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.

 2. Luminous intensity / luminous Flux: +/-15%.

 * Luminous intensity value is traceable to CIE127-2007 standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	Тур.	Max.	Units	Test Conditions			
λpeak	Peak Wavelength	Super Bright Red	655		nm	IF=20mA			
λD [1]	Dominant Wavelength	Super Bright Red	640		nm	IF=20mA			
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	IF=20mA			
С	Capacitance	Super Bright Red	45		pF	VF=0V;f=1MHz			
VF [2]	Forward Voltage	Super Bright Red	1.85	2.5	V	IF=20mA			
lr	Reverse Current	Super Bright Red		10	uA	V _R =5V			

Notes:

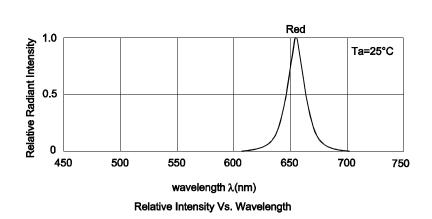
- 1. Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to CIE127-2007 standards.
- 4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

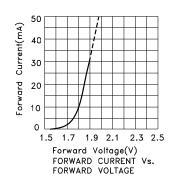
Parameter	Values	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	155	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

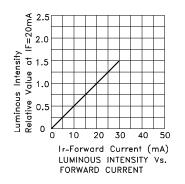
- Notes: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity - Ref JEDEC/JESD625-A and JEDEC/J-STD-033.

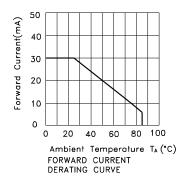
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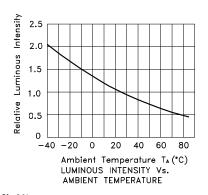


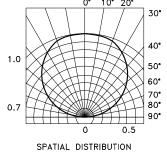
Super Bright Red AA4040SRC











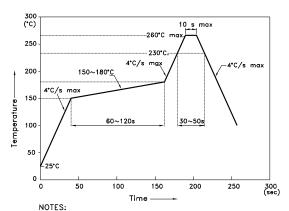
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Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

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.

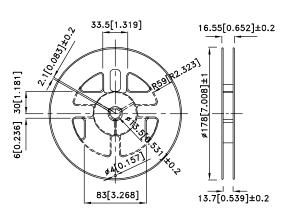
 3.Number of reflow process shall be 2 times or less.

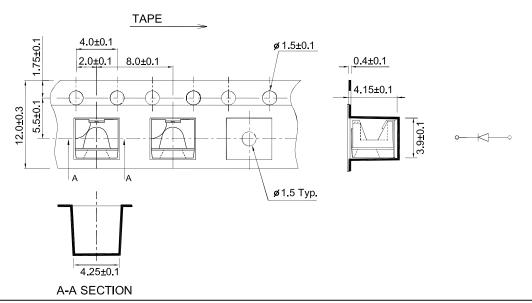
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)

4.2

Tape Dimensions (Units: mm)

Reel Dimension

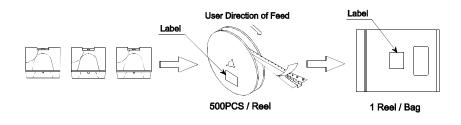


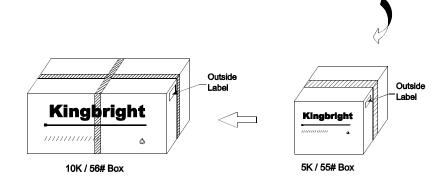


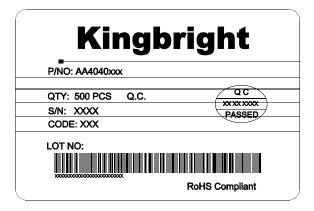
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PACKING & LABEL SPECIFICATIONS

AA4040SRC







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