

#### > Features:

- Single color
- High bright output
- Low power consumption.
- High reliability and long life

### > Descriptions:

Dice material: AlGaInP

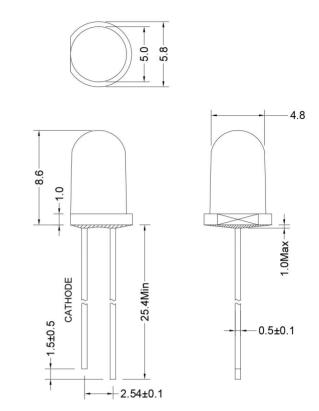
Emitting Color:

Super Bright Red

Device Outline:

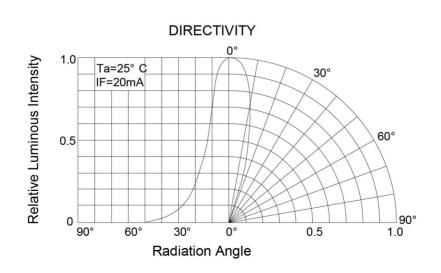
Lens Type:

Water Clear



- 1. All dimensions are millimeters: mm.
- 2. Tolerance is +/-0.20mm unless otherwise noted

## > Directivity:



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# Absolute maximum ratings (Ta = 25℃)

Parameter	Symbol	Test Condition	Valu	Unit		
Parameter	Symbol	rest Condition	Min.	Max.	Offic	
Reverse Voltage	VR	IR = 30 μ A	5	1	V	
Forward Current	lF			30	mA	
Power Dissipation	Dissipation Pd			75	mW	
Pulse Current	Ipeak	Duty=0.1mS,1kHz		100	mA	
Operating Temperature	Topr		-40	+85	$\mathbb{C}$	
Storage Temperature	Tstr		-40	+100	$^{\circ}$	

# Electrical and optical characteristics (Ta = $25^{\circ}$ )

Parameter	Symbol	Test Condition	Values			l lait
Parameter	Symbol		Min.	Тур.	Max.	Unit
Forward Voltage	VF	IF=20mA		2.1	2.5	V
Reverse Current	lR	VR=5V			30	μ <b>А</b>
Dominate Wavelength	λd	IF=20mA		624		nm
Peak Wavelength	λр	IF=20mA		632		nm
Spectral Line half-width	Δλ	IF=20mA		15		nm
Luminous Intensity	lv	IF=20mA		4700		mcd
Viewing Angle	<b>2</b> θ 1/2	IF=20mA		26		deg

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## Typical electrical/optical characteristic curves:

Fig.1 Forward Current Vs. Forward Voltage

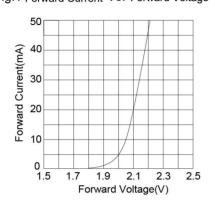


Fig.2 Relative Brightness Vs. Forward Voltage

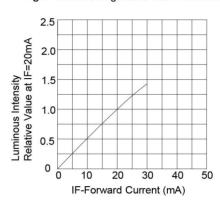


Fig.3 Forward Current Vs. Ambient temperature

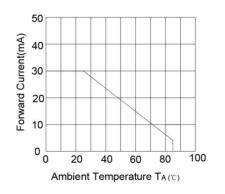
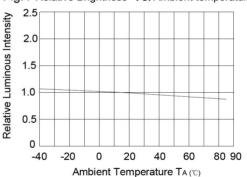
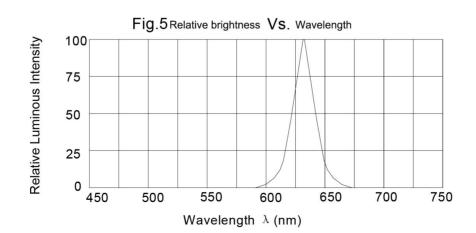


Fig.4 Relative Brightness Vs. Ambient temperature





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## Label Form Specification

Solution
P/N:
Rank:/
Qty:pcs_QC:
Date:
Lot No:
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P/N: Customer's Production Number

QTY: Packing Quantity

Ranks: Iv / Vf / WD

Iv: Iv Rank; Vf: Vf Rank; WD: Color Group

QC: Quality Control chapter

Date: mm / dd / yy

mm: Month; dd: Date; yy: Year;

Lot No: Production batch Number

#### ➤ Lead Forming/

- 1. Any lead forming or bending must be done before soldering.
- 2. When forming leads, there must be a minimum of 2mm clearance between the base of the LED lens and the lead bend.

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#### LED SPECIFICATION

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- 3. Avoid bending the leads at the same point more than once.
- 4. During assembly onto PCB, the lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement.

# > Soldering Condition

Careful attention should be paid during soldering. When soldering, leave more then 2mm from solder joir to case, and soldering beyond the base of the tie bar is recommended.

Avoiding applying any stress to the lead frame while the LEDs are at high temperature particularly when soldering.

#### **Recommended soldering conditions:**

Hand Soldering		DIP Soldering		
Temp.at tip of iron	300°C Max.(30WMax.)	Preheat temp.	100°C Max. (60 sec Max.)	
Soldering time	3 sec Max.	Bath temp.	260°C Max	
Distance	Distance 2mm Min.(From solder joint to case)		3 sec Max.	
		Distance	2mm Min	

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#### LED SPECIFICATION

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## Cleaning

1. Do not clean LEDs with water, Alcohol are recommended solvents for cleaning. When using other
solvents, it should be confirmed beforehand whether the solvents will dissolve the resin or not.

2. LEDs may be damaged by ultrasonic-washed	. Before cleaning,	a pre-test should be	done to	confirm
whether any damage to the LEDs will occur.				

#### > Storage

- 1. Environmental temperature: -40°C---100°C, Recommended: -20°C---50°C
- 2. Environmental humidity: 30%---70%, Recommended: 40%---60%

## > Static Electricity

➤ 1. Static Electricity or power surge will damage the LED.

It is recommended that a wrist band or an anti-electrostatic glove be used when handling the LEDs.

2. All production machinery and test instruments must be electrically grounded.

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#### LED SPECIFICATION

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- 3. Maintain a humidity level of 50% or higher in production areas.
- 4. Use anti-static packaging for transport and storage.

#### Notes

- 1. This datasheet will be update regularly, if there comes out any changes, pls confirmed by the latest datasheet.
- 2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. SUNPU assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.

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