

## GHB-1104R-DR

### Features

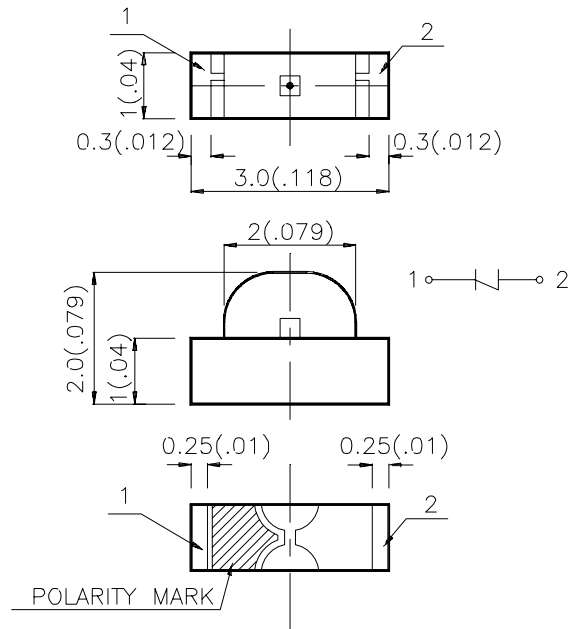
- 3.0mmx1.0mm SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.

### Package Dimensions

### Description

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

### 3.0x1.0 mm SMD CHIP LED LAMP



### Notes:

- All dimensions are in millimeters (inches).
- Tolerance is 0.15(0.006") unless otherwise noted.
- Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	
GHB-1104R-DR	SUPER BRIGHT RED(GaAlAs)	WATER CLEAR	18	60	120°

Note:

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

## Electrical / Optical Characteristics at T<sub>A</sub>=25 C

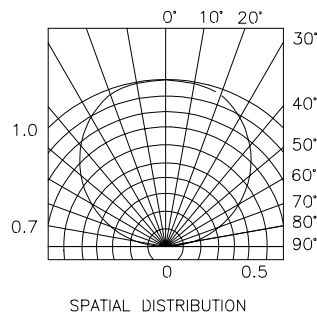
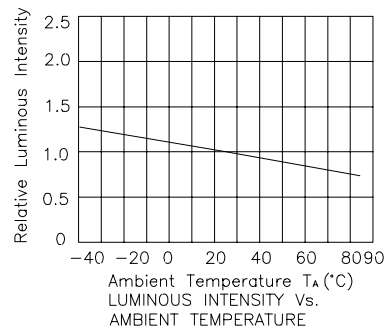
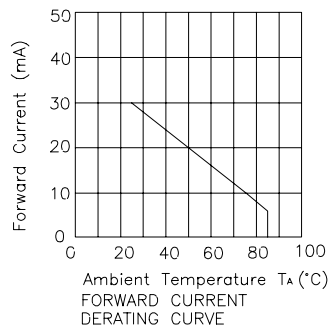
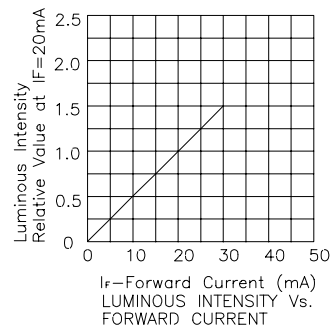
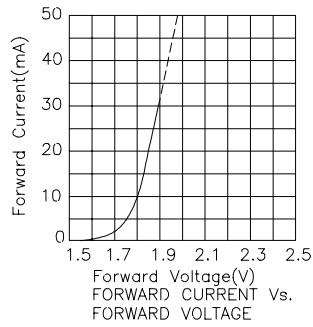
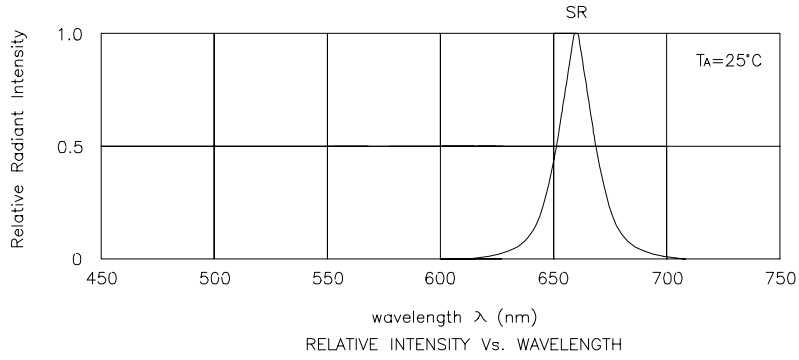
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
peak	Peak Wavelength	Super Bright Red	660		nm	I <sub>F</sub> =20mA
D	Dominant Wavelength	Super Bright Red	640		nm	I <sub>F</sub> =20mA
1/2	Spectral Line Half-width	Super Bright Red	20		nm	I <sub>F</sub> =20mA
C	Capacitance	Super Bright Red	45		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Super Bright Red	1.85	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Super Bright Red		10	μA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25 C

Parameter	Super Bright Red	Units
Power dissipation	100	mW
DC Forward Current	30	mA
Peak Forward Current [1]	155	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40 C To +85 C	

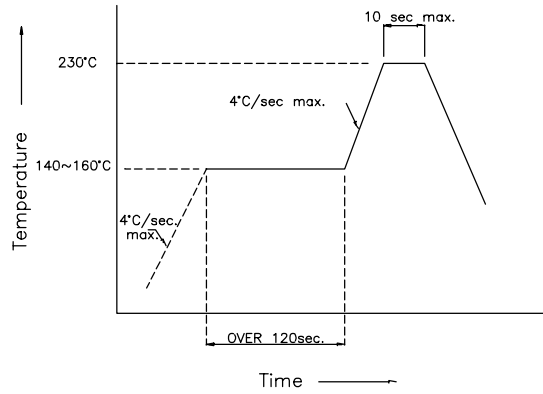
Note:

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

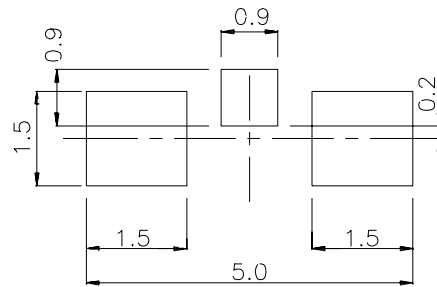


### SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



### Recommended Soldering Pattern (Units : mm)



### Tape Specifications (Units : mm)

