

WP13HD

BRIGHT RED

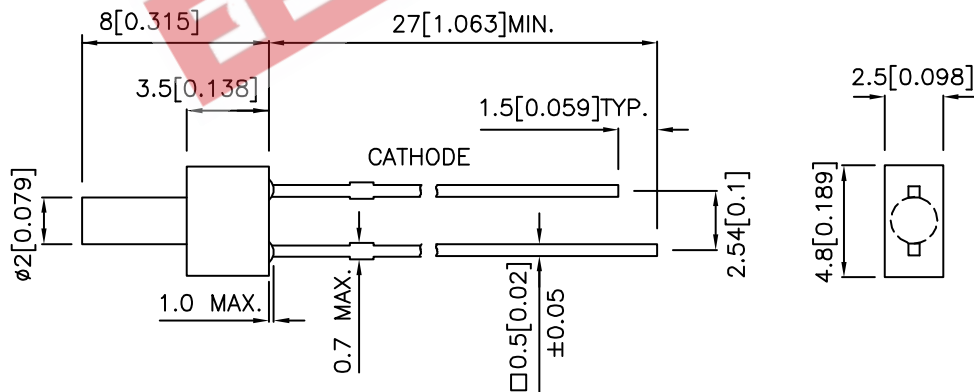
### Features

- MOUNTS FLUSH WITH PANEL.
- LOW POWER CONSUMPTION.
- SUITABLE FOR AUDIO PANEL INDICATOR.
- FITS 2mm HOLE IN PANEL UP TO 3.5mm (.138").
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

### Description

The Bright Red source color devices are made with Gallium Phosphide Red 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.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10mA		Viewing Angle
			Min.	Typ.	2θ1/2
WP13HD	BRIGHT RED (GaP)	RED DIFFUSED	0.4	1.5	70°

Note:

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

## Electrical / Optical Characteristics at TA=25°C

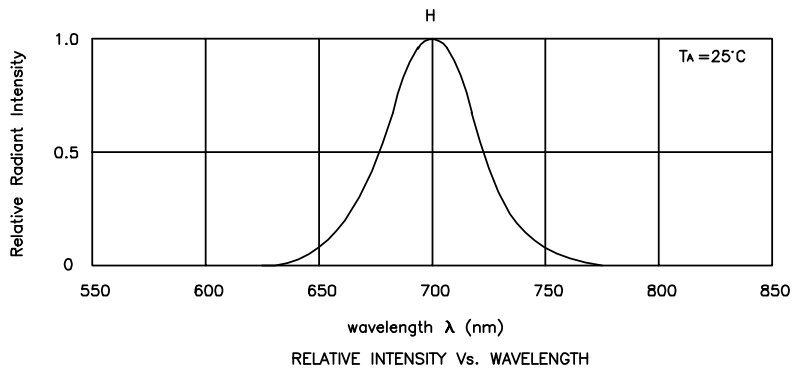
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Bright Red	700		nm	IF=20mA
λD	Dominant Wavelength	Bright Red	660		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Bright Red	45		nm	IF=20mA
C	Capacitance	Bright Red	40		pF	VF=0V;f=1MHz
VF	Forward Voltage	Bright Red	2.25	2.5	V	IF=20mA
IR	Reverse Current	Bright Red		10	uA	VR = 5V

## Absolute Maximum Ratings at TA=25°C

Parameter	Bright Red	Units
Power dissipation	120	mW
DC Forward Current	25	mA
Peak Forward Current [1]	130	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

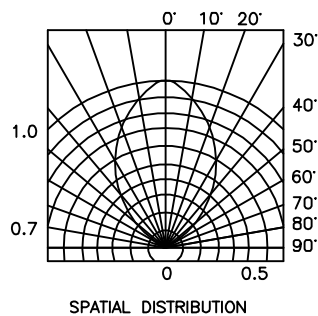
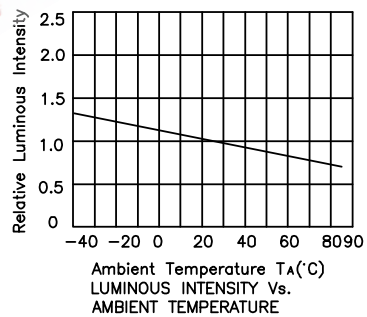
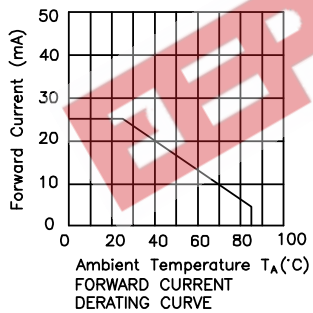
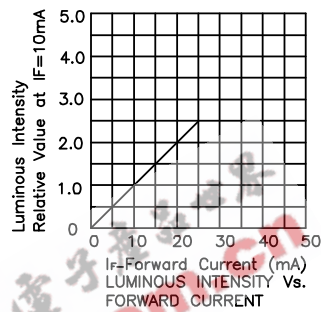
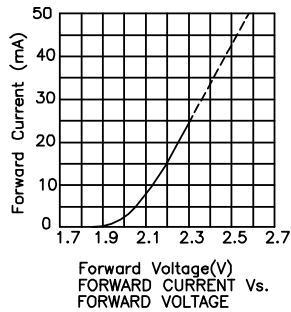
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



## Bright Red

### WP13HD



#### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.