Kingbright

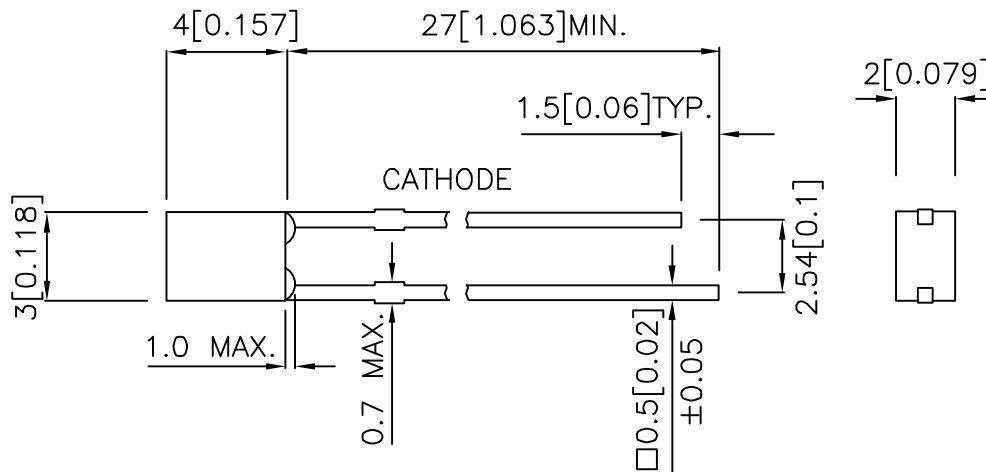L-914HDT   BRIGHT RED

Features

● LOW POWER CONSUMPTION.

● ULTRA BRIGHTNESS IS AVAILABLE.

● RELIABLE AND RUGGED.

● EXCELLENT UNIFORMITY OF LIGHT OUTPUT.

● SUITABLE FOR LEVEL INDICATOR.

● 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 ±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.

Kingbright

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 10 mA | | Viewing Angle |
			Min.	Typ.	2 θ 1/2
L-914HDT	BRIGHT RED (GaP)	RED DIFFUSED	0.2	1	100°

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
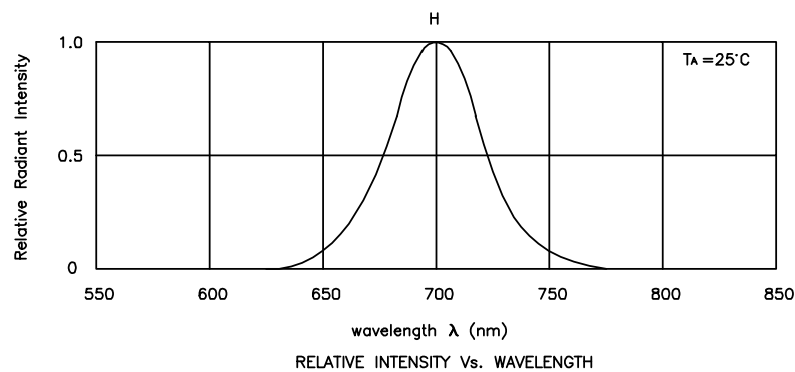
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Bright Red	700		nm	I_F=20mA
λD	Dominant Wavelength	Bright Red	660		nm	I_F=20mA
$\Delta\lambda$1/2	Spectral Line Half-width	Bright Red	45		nm	I_F=20mA
C	Capacitance	Bright Red	40		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Bright Red	2.25	2.5	V	I_F=20mA
I_R	Reverse Current	Bright Red		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

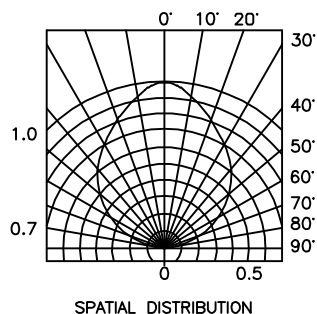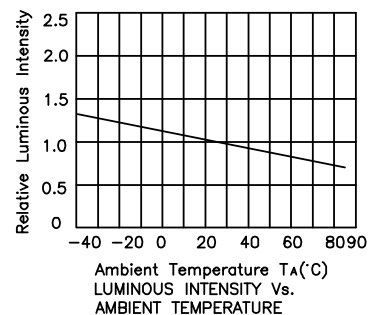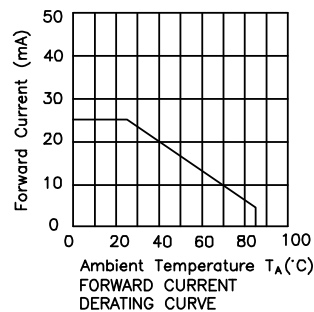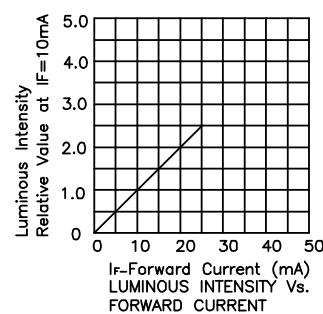| Parameter	Bright Red	Units
Power dissipation	120	mW
DC Forward Current	25	mA
Peak Forward Current [1]	130	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

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

Kingbright

RELATIVE INTENSITY Vs. WAVELENGTH

Bright Red   **L-914HDT**

FORWARD CURRENT Vs.
FORWARD VOLTAGE

LUMINOUS INTENSITY Vs.
FORWARD CURRENT

FORWARD CURRENT
DERATING CURVE

LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

SPATIAL DISTRIBUTION
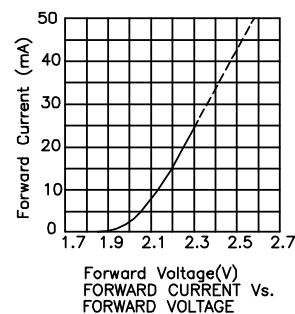
Remarks:

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.