

L-503HDT

BRIGHT RED

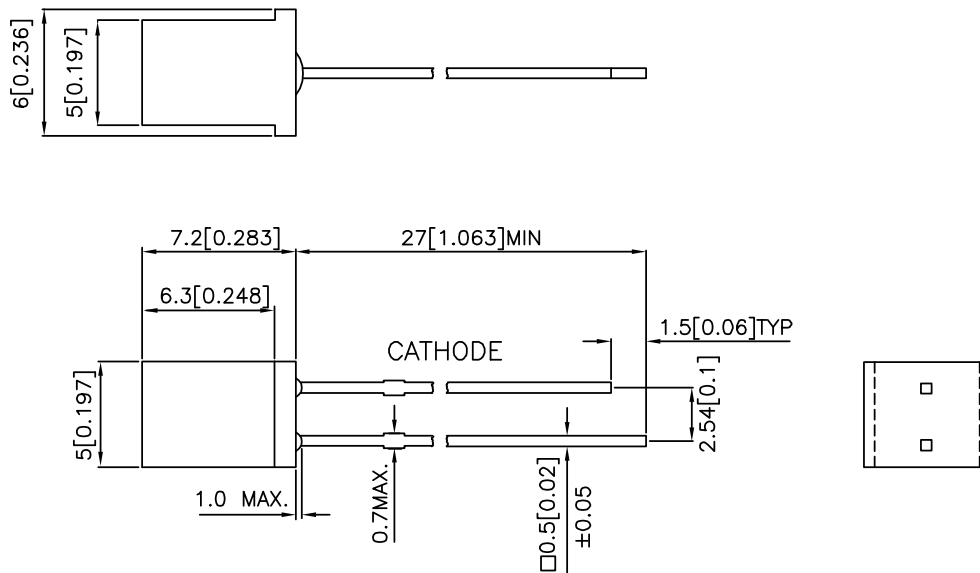
Features

- LOW POWER CONSUMPTION.
- ULTRA BRIGHTNESS IS AVAILABLE.
- WIDE VIEWING ANGLE.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- IDEAL AS FLUSH MOUNTED PANEL INDICATORS.
- 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 ± 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) @ 10 mA		Viewing Angle
			Min.	Typ.	θ1/2
L-503HDT	BRIGHT RED (GaP)	RED DIFFUSED	0.4	1	110°

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

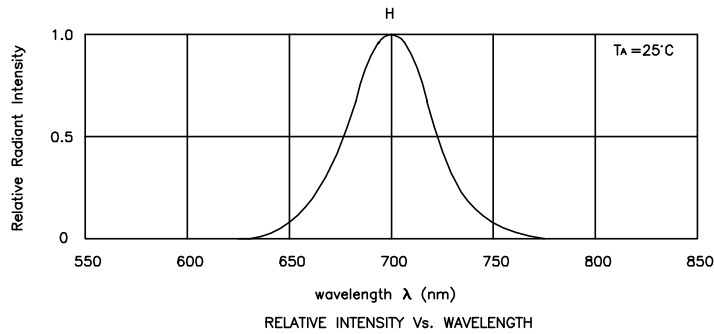
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Bright Red	700		nm	IF=20mA
λ_D	Dominant Wavelength	Bright Red	660		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Bright Red	45		nm	IF=20mA
C	Capacitance	Bright Red	40		pF	VF=0V;f=1MHz
VF	Forward Voltage	Bright 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	

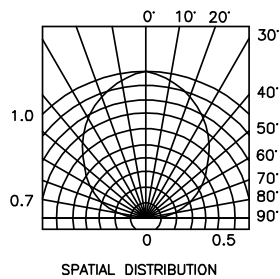
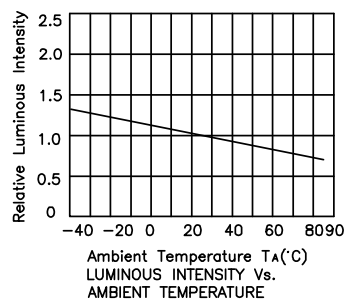
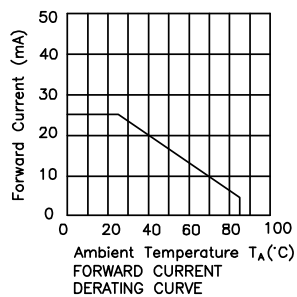
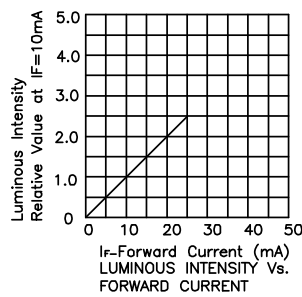
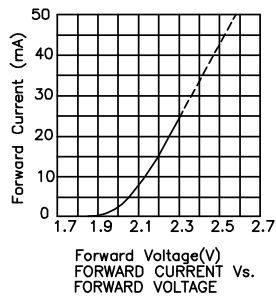
Notes:

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



Bright Red

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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.