

Features

- LOW POWER CONSUMPTION.
- RELIABLE AND RUGGED.
- SUITABLE FOR DIRECTION INDICATOR.
- I.C. COMPATIBLE.

L323HD BRIGHT RED

L323GD GREEN

L323ID HIGH EFFICIENCY RED

L323YD YELLOW

L323ED ORANGE

Package Dimensions

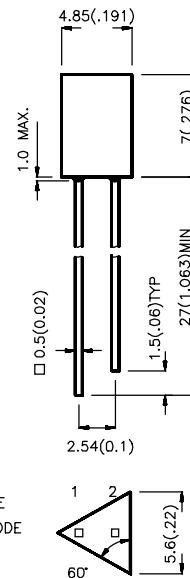
Description

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

The High Efficiency Red and Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.



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 lead emerge package.
4. Specifications are subjected to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | I _v (mcd) @ 10 mA | | Viewing Angle |
|----------|---------------------------------|-----------------|------------------------------|------|---------------|
| | | | Min. | Typ. | |
| L323HD | BRIGHT RED (GaP) | RED DIFFUSED | 0.5 | 1 | 100° |
| L323ID | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 5 | 8 | 100° |
| L323ED | ORANGE (GaAsP/GaP) | ORANGE DIFFUSED | 5 | 8 | 100° |
| L323GD | GREEN (GaP) | GREEN DIFFUSED | 2 | 4 | 100° |
| L323YD | YELLOW (GaAsP/GaP) | YELLOW DIFFUSED | 2 | 4 | 100° |

Note:

1. $\theta/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at $T_A=25^\circ C$

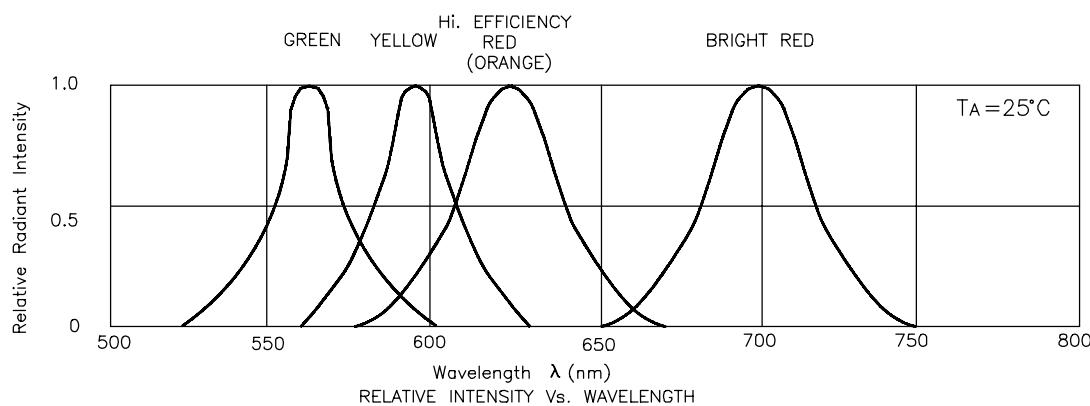
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|-------------------------|--|---------------------------------|---------------------------------|-------|-----------------|
| λ_{peak} | Peak Wavelength | Bright Red High Efficiency Red Orange Green Yellow | 700 625 625 565 590 | | nm | IF=20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Halfwidth | Bright Red High Efficiency Red Orange Green Yellow | 45 45 45 30 35 | | nm | IF=20mA |
| C | Capacitance | Bright Red High Efficiency Red Orange Green Yellow | 40 12 12 45 10 | | pF | VF=0V;F=1MHz |
| V_F | Forward Voltage | Bright Red High Efficiency Red Orange Green Yellow | 2.0 2.0 2.0 2.2 2.1 | 2.5 2.5 2.5 2.5 2.5 | V | IF=20mA |
| I_R | Reverse Current | All | | 10 | uA | VR=5V |

Absolute Maximum Ratings at $T_A=25^\circ C$

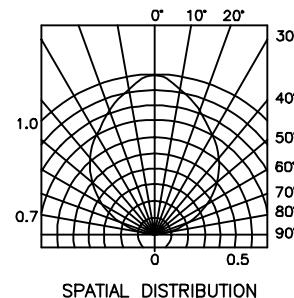
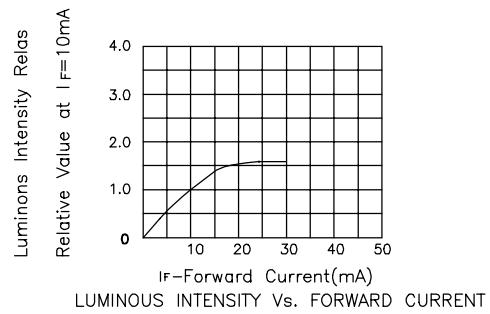
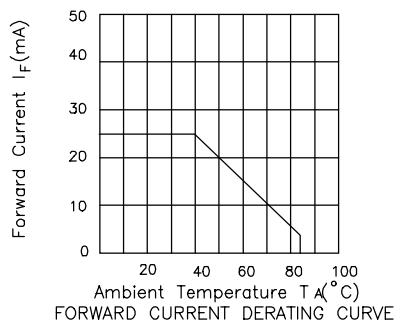
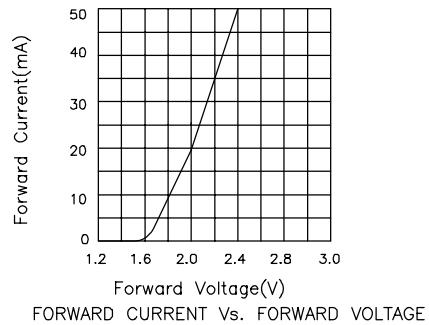
| Parameter | Bright Red | High Efficiency Red | Orange | Green | Yellow | Units |
|-------------------------------|------------|---------------------|--------|-------|--------|---------------------|
| Power dissipation | 120 | 105 | 105 | 105 | 105 | mW |
| DC Forward Current | 25 | 30 | 30 | 25 | 30 | mA |
| Peak Forward Current [1] | 150 | 150 | 150 | 150 | 150 | mA |
| Reverse Voltage | 5 | 5 | 5 | 5 | 5 | V |
| Operation/Storage Temperature | | | | | | -40°C To +85°C |
| Lead Solder Temperature [2] | | | | | | 260°C For 5 Seconds |

Notes:

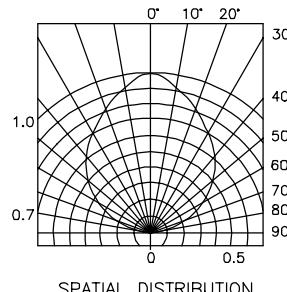
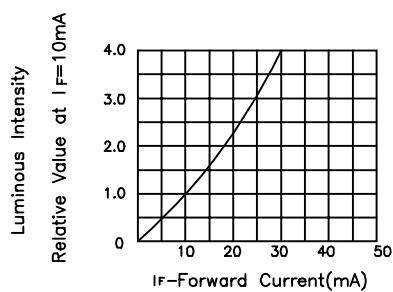
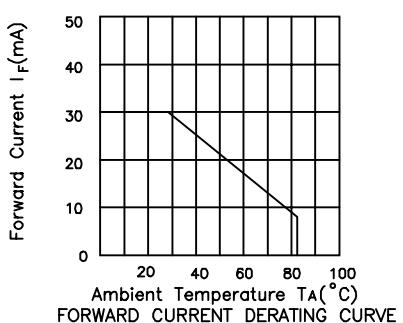
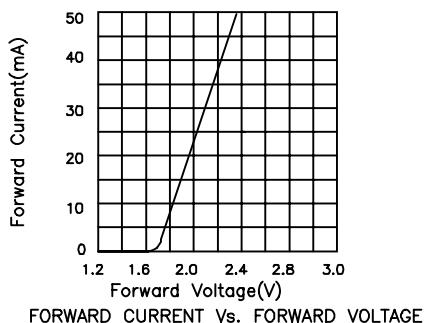
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2.4mm below package base.



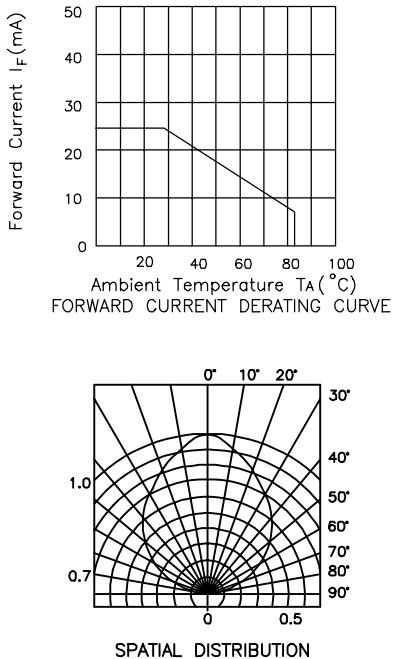
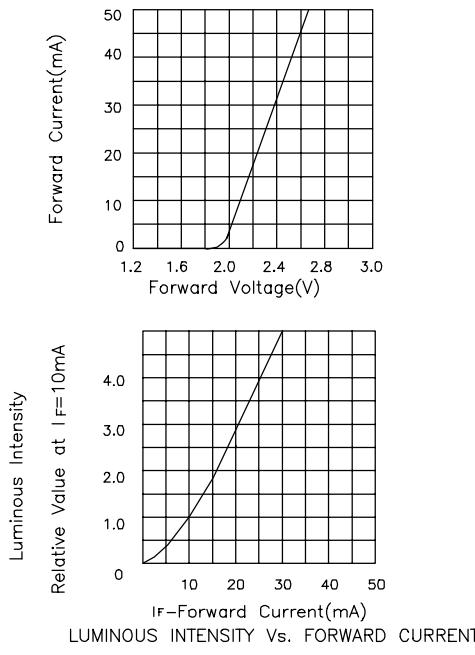
Bright Red L323HD



High Efficiency Red L323ID Orange L323ED



Green L323GD



Yellow L323YD

