

L-796BID HIGH EFFICIENCY RED
 L-796BGD GREEN
 L-796BYD YELLOW
 L-796BSRC-B SUPER BRIGHT RED
 L-796BSRD-B SUPER BRIGHT RED

Features

- 8mm DIAMETER BIG LAMP WITH BULIT-IN BLINKING IC.
- OPERATION VOLTAGE FROM 3.5V to 14V.
- BLINKING FREQUENCY FROM 3.0Hz to 1.5Hz.

Description

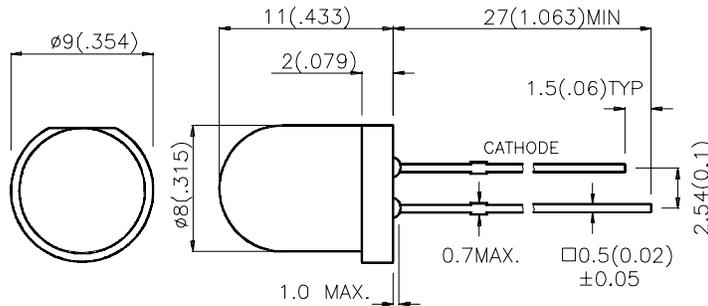
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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.

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide 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 lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) VF=9V | | Viewing Angle |
|-------------|---------------------------------|-----------------|-------------------|------|---------------|
| | | | Min. | Typ. | 2θ1/2 |
| L-796BID | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 20 | 60 | 60° |
| L-796BGD | GREEN (GaP) | GREEN DIFFUSED | 20 | 50 | 60° |
| L-796BYD | YELLOW (GaAsP/GaP) | YELLOW DIFFUSED | 20 | 40 | 60° |
| L-796BSRD-B | SUPER BRIGHT RED(GaAlAs) | RED DIFFUSED | 100 | 300 | 60° |
| L-796BSRC-B | SUPER BRIGHT RED(GaAlAs) | WATER CLEAR | 500 | 800 | 40° |

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

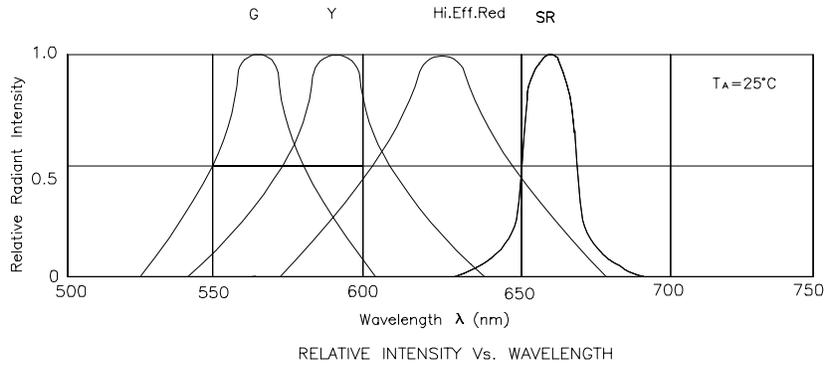
| Symbol | Parameter | Device | Min | Typ | Units | Test Conditions |
|-------------------|-------------------------|--|------------------|------------------------------|-------|--|
| λ _{peak} | Peak Wavelength | High Efficiency Red Green Yellow Super Bright Red | | 627 565 590 660 | nm | |
| λ _D | Dominate Wavelength | High Efficiency Red Green Yellow Super Bright Red | | 625 568 588 640 | nm | |
| Δλ _{1/2} | Spectral Line Halfwidth | High Efficiency Red Green Yellow Super Bright Red | | 45 30 35 20 | nm | |
| I _F | Forward Current | High Efficiency Red Green Yellow Super Bright Red | 8 8 8 8 | 22 20 21 25 | mA | Min: V _F =3.5V Typ: V _F =5V |
| I _{SON} | Supply Current | High Efficiency Red Green Yellow Super Bright Red | | 8~44 8~42 8~43 8~45 | uA | V _F =3.5V~14V |
| f | Blink Frequency | All | | 3~1.5 | Hz | V _F =3.5V~14V |

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

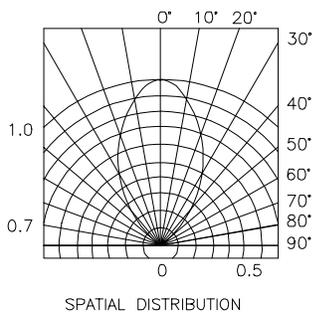
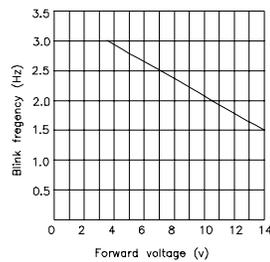
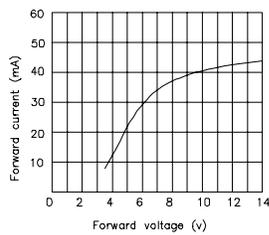
| Parameter | High Efficiency Red | Green | Yellow | Super Bright Red | Units |
|--------------------------------|---------------------|-------|--------|------------------|-------|
| Power dissipation | 310 | 310 | 310 | 310 | mW |
| DC Forward Current | 55 | 55 | 55 | 55 | mA |
| Reverse Voltage | 0.5 | 0.5 | 0.5 | 0.5 | V |
| Operating Temperature | -40°C To +70°C | | | | |
| Storage Temperature | -50°C To +100°C | | | | |
| Lead Soldering Temperature [1] | 260°C For 5 Seconds | | | | |

Note:

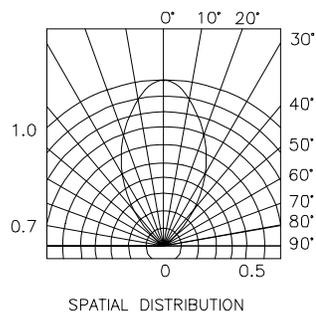
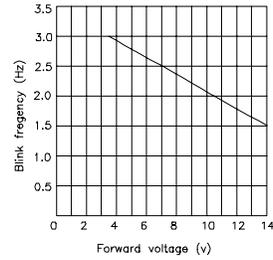
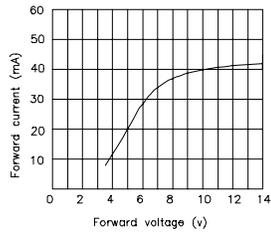
1. 4mm below package base.



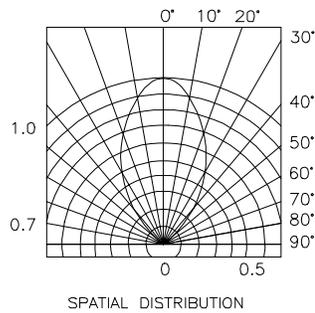
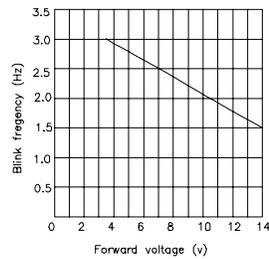
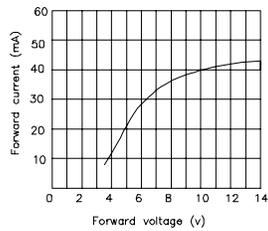
High Efficiency Red L-796BID



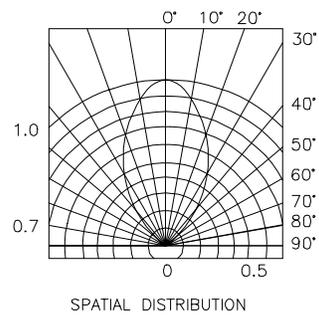
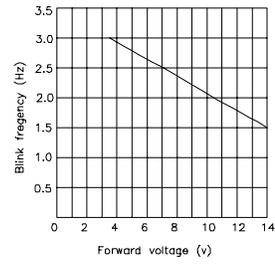
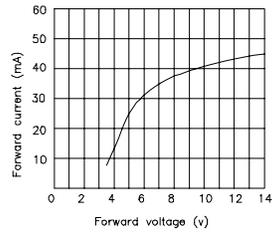
Green L-796BGD



Yellow L-796BYD



Super Bright Red L-796BSRD-B



Super Bright Red L-796BSRC-B

