

L-7113ID

HIGH EFFICIENCY RED

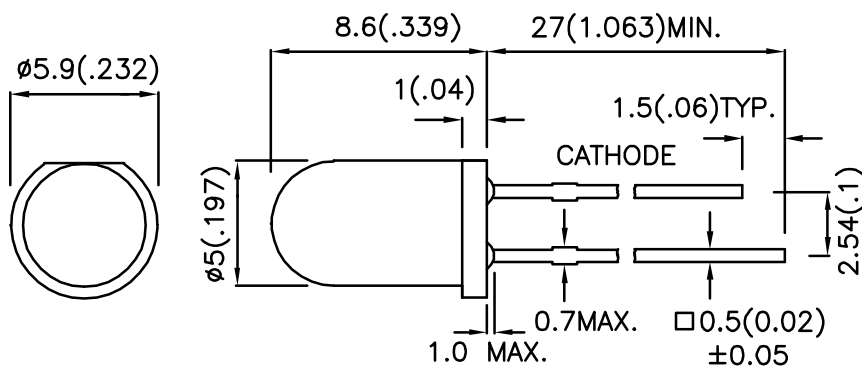
Features

- LOW POWER CONSUMPTION.
- POPULAR T-1 3/4 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.
- RoHS COMPLIANT.

Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange 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 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. | 2 θ 1/2 |
| L-7113ID | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 8 | 45 | 30° |

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

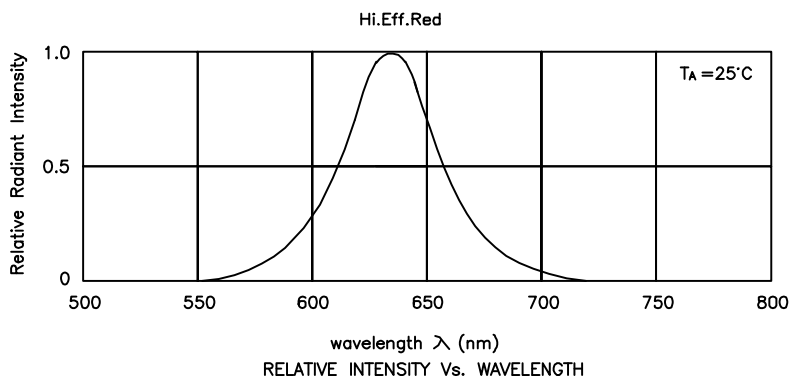
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|---------------------|------|------|-------|-----------------|
| λ_{peak} | Peak Wavelength | High Efficiency Red | 627 | | nm | IF=20mA |
| λ_D | Dominant Wavelength | High Efficiency Red | 625 | | nm | IF=20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | High Efficiency Red | 45 | | nm | IF=20mA |
| C | Capacitance | High Efficiency Red | 15 | | pF | VF=0V;f=1MHz |
| VF | Forward Voltage | High Efficiency Red | 2.0 | 2.5 | V | IF=20mA |
| IR | Reverse Current | High Efficiency Red | | 10 | uA | VR = 5V |

Absolute Maximum Ratings at TA=25°C

| Parameter | High Efficiency Red | Units |
|-------------------------------|---------------------|-------|
| Power dissipation | 105 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 160 | 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 | |

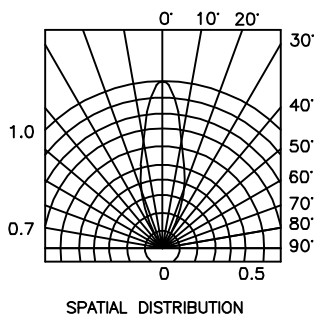
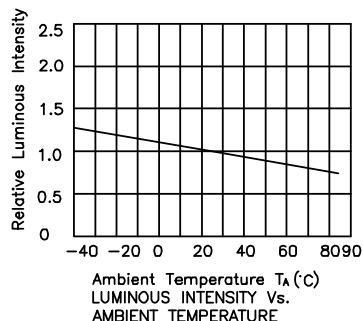
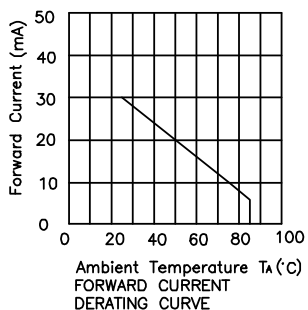
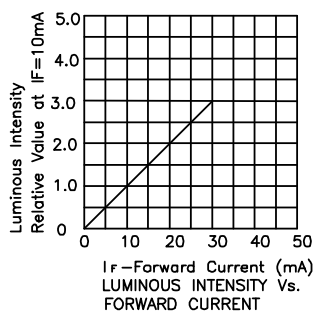
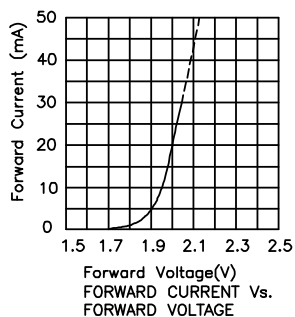
Notes:

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



High Efficiency Red

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Remarks:

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

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

Note: Accuracy may depend on the sorting parameters.