

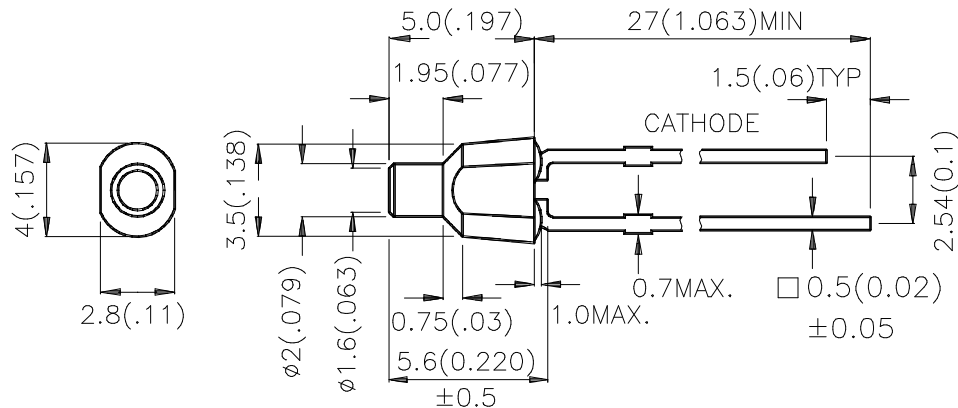
### Features

- MOUNTS FLUSH WITH PANEL.
- LOW POWER CONSUMPTION.
- LONG LIFE - SOLID STATE RELIABILITY.

### 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 package.
4. Specifications are subject to change without notice.

## Selection Guide

| Part No. | Dice                            | Lens Type    | Iv (mcd)<br>@ 10 mA |      | Viewing<br>Angle |
|----------|---------------------------------|--------------|---------------------|------|------------------|
|          |                                 |              | Min.                | Typ. | 2 $\theta$ 1/2   |
| W1034ID  | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 3                   | 8    | 70°              |

Note:

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

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

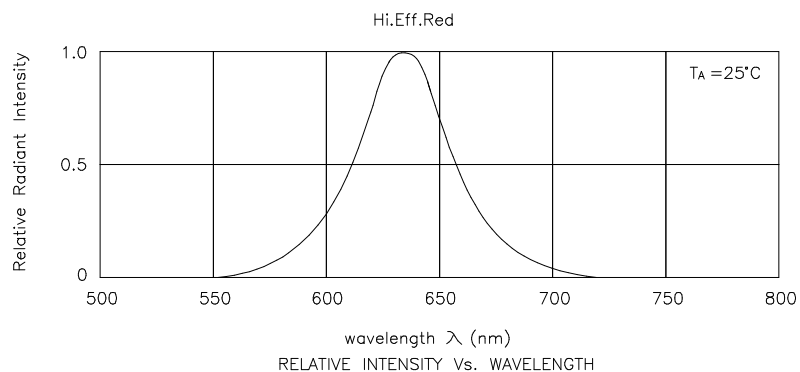
| Symbol                | Parameter                | Device              | Typ. | Max. | Units | Test Conditions               |
|-----------------------|--------------------------|---------------------|------|------|-------|-------------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | High Efficiency Red | 627  |      | nm    | I <sub>F</sub> = 20mA         |
| $\lambda_D$           | Dominate Wavelength      | High Efficiency Red | 625  |      | nm    | I <sub>F</sub> = 20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | High Efficiency Red | 45   |      | nm    | I <sub>F</sub> = 20mA         |
| C                     | Capacitance              | High Efficiency Red | 15   |      | pF    | V <sub>F</sub> = 0V; f = 1MHz |
| V <sub>F</sub>        | Forward Voltage          | High Efficiency Red | 2    | 2.5  | V     | I <sub>F</sub> = 20mA         |
| I <sub>R</sub>        | Reverse Current          | High Efficiency Red |      | 10   | uA    | V <sub>R</sub> = 5V           |

## Absolute Maximum Ratings at T<sub>A</sub>=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 5 Seconds |       |

Notes:

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



## High Efficiency Red

## W1034ID

