

L-73CB/3IDA

HIGH EFFICIENCY RED

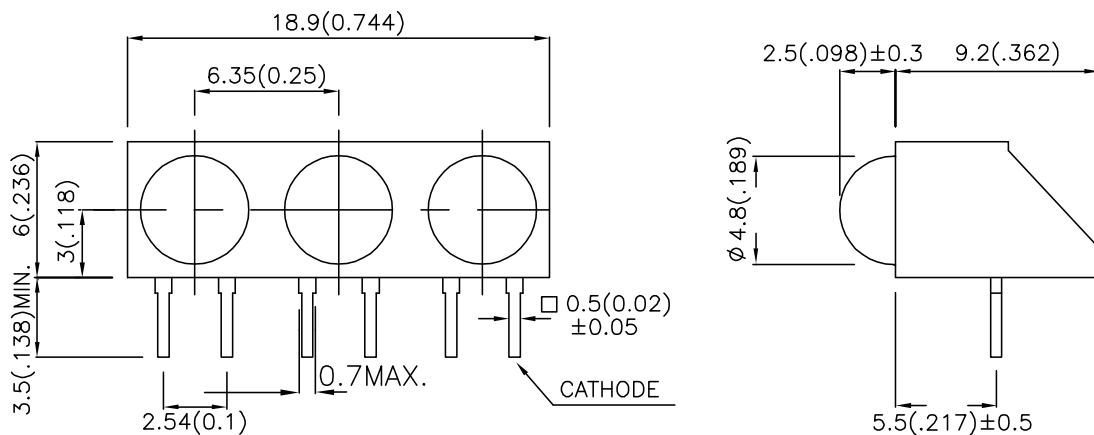
### Features

- PRE-TRIMMED LEADS FOR PC MOUNTING.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY-LIFE MEASURED IN YEARS.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- 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 ±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)<br>@ 10mA |      | Viewing<br>Angle |
|-------------|---------------------------------|--------------|--------------------|------|------------------|
|             |                                 |              | Min.               | Typ. | 2 $\theta$ 1/2   |
| L-73CB/3IDA | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 8                  | 30   | 60°              |

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 TA=25°C

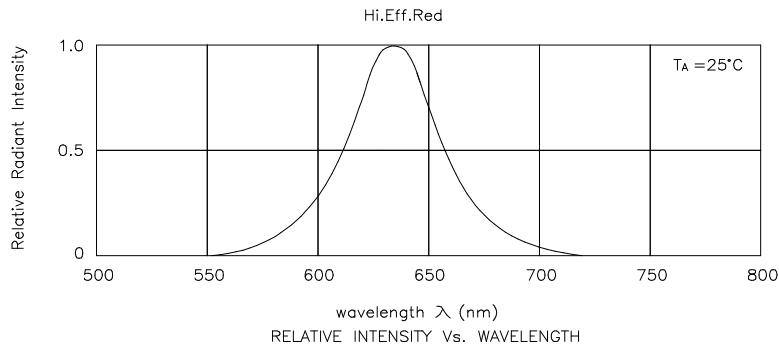
| Symbol                | Parameter                | Device              | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|---------------------|------|------|-------|-----------------|
| $\lambda_{peak}$      | Peak Wavelength          | High Efficiency Red | 627  |      | nm    | IF=20mA         |
| $\lambda_D$           | 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 |       |

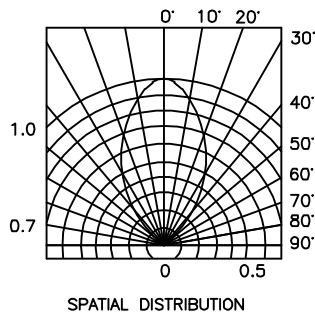
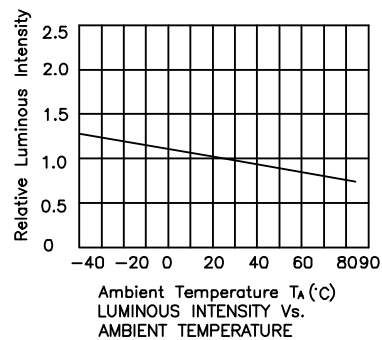
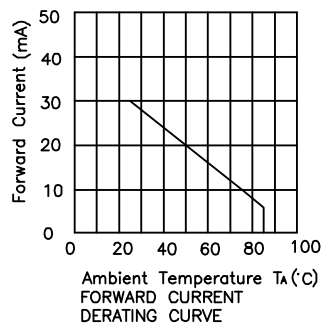
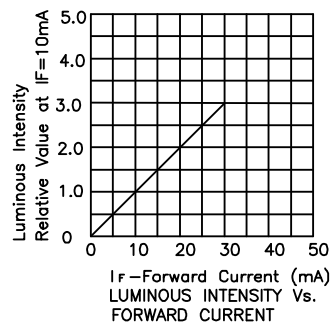
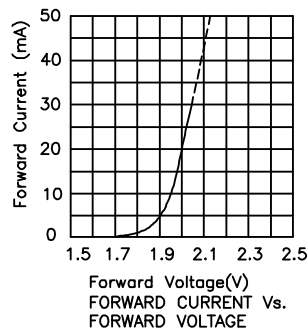
Notes:

- 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, 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.