## T-1 3/4 (5mm) SOLID STATE LAMP

P/N: L-53ID-5V

HIGH EFFICIENCY RED

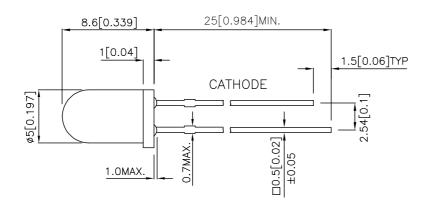
## **Features**

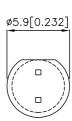
- •LOW POWER CONSUMPTION.
- •POPULAR T-1 3/4 DIAMETER PACKAGE.
- •GENERAL PURPOSE LEADS.
- •RELIABLE AND RUGGED.
- •LONG LIFE SOLID STATE RELIABILITY.
- •AVAILABLE ON TAPE AND REEL.
- •5V UBTERBAL RESISTOR.
- •RoHS COMPLIANT.

## **Description**

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

## **Package Dimensions**





- 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 leads emerge from the package.
- 4. Specifications are subject to change without notice.

SPEC NO: DSAD0628 APPROVED: J. Lu

**REV NO: V.3** CHECKED: Allen Liu DATE: APR/07/2006 DRAWN: Z.K.ZHNAG **PAGE: 1 OF 3** 

# Kingbright

## **Selection Guide**

| Part No.  | Dice                            | Lens Type    | Iv (mcd) [2]<br>V=5V |      | Viewing<br>Angle [1] |
|-----------|---------------------------------|--------------|----------------------|------|----------------------|
|           |                                 |              | Min.                 | Тур. | 2 θ 1/2              |
| L-53ID-5V | HIGH EFFICIENCY RED (GaAsP/GaP) | RED DIFFUSED | 12                   | 30   | 60°                  |

#### Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value. 2.Luminous Intensity / Luminous Flux: +/-15%.

## Electrical / Optical Characteristics at Ta=25°C

| Symbol | Parameter                | Device              | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|---------------------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | High Efficiency Red | 627  |      | nm    | VF=5V           |
| λD [1] | Dominant Wavelength      | High Efficiency Red | 625  |      | nm    | VF=5V           |
| Δλ1/2  | Spectral Line Half-width | High Efficiency Red | 45   |      | nm    | VF=5V           |
| lF     | Forward Current          | High Efficiency Red | 13   | 17.5 | mA    | VF=5V           |
| lR     | Reverse Current          | High Efficiency Red |      | 10   | uA    | VR= 5V          |

### Note:

1. Wavelength: +/-1nm.

## Absolute Maximum Ratings at TA=25°C

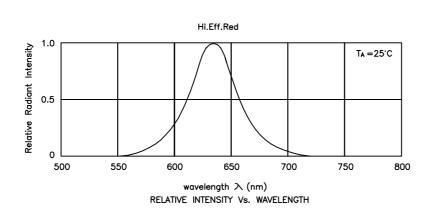
| Parameter                  | High Efficiency Red | Units |  |  |
|----------------------------|---------------------|-------|--|--|
| Power dissipation          | 85                  | mW    |  |  |
| Forward Voltage            | 6                   | V     |  |  |
| Reverse Voltage            | 5                   | V     |  |  |
| Operating Temperature      | -40°C To +70°C      |       |  |  |
| Storage Temperature        | -40°C To +85°C      |       |  |  |
| Lead Solder Temperature[1] | 260°C For 3 Seconds |       |  |  |
| Lead Solder Temperature[2] | 260°C For 5 Seconds |       |  |  |

## Notes:

- 1. 2mm below package base.
- 2. 5mm below package base.

SPEC NO: DSAD0628 REV NO: V.3 DATE: APR/07/2006 PAGE: 2 OF 3
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: Z.K.ZHNAG

# Kingbright



High Efficiency Red

L-53ID-5V

