

P/N: L-53YD-12V

YELLOW

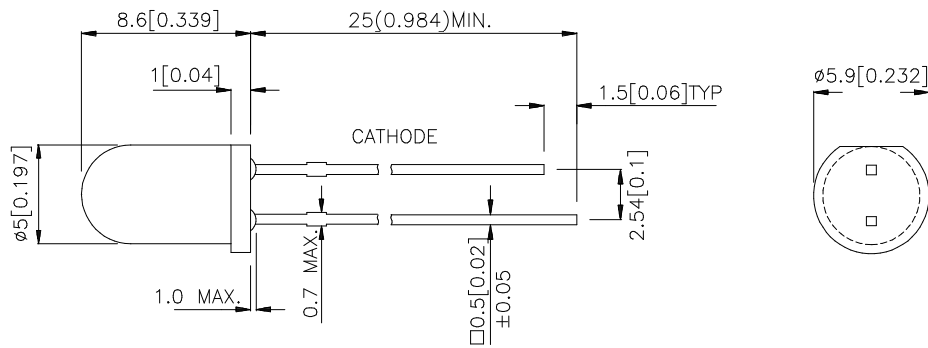
### Features

- LOW POWER CONSUMPTION.
- POPULAR T-1 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.
- 12V INTERNAL RESISTOR.
- RoHS COMPLIANT.

### Description

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow 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 leads emerge from the package.
4. Specifications are subject to change without notice.

## Selection Guide

| Part No.   | Dice               | Lens Type       | Iv (mcd) [2]<br>V= 12V |      | Viewing Angle [1] |
|------------|--------------------|-----------------|------------------------|------|-------------------|
|            |                    |                 | Min.                   | Typ. | 2θ1/2             |
| L-53YD-12V | YELLOW (GaAsP/GaP) | YELLOW DIFFUSED | 5                      | 20   | 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 | Typ. | Max. | Units | Test Conditions     |
|-----------------------|--------------------------|--------|------|------|-------|---------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Yellow | 590  |      | nm    | V <sub>F</sub> =12V |
| $\lambda_D$ [1]       | Dominant Wavelength      | Yellow | 588  |      | nm    | V <sub>F</sub> =12V |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Yellow | 35   |      | nm    | V <sub>F</sub> =12V |
| I <sub>F</sub>        | Forward Current          | Yellow | 8.5  | 11.5 | mA    | V <sub>F</sub> =12V |
| I <sub>R</sub>        | Reverse Current          | Yellow |      | 10   | uA    | V <sub>R</sub> = 5V |

Note:

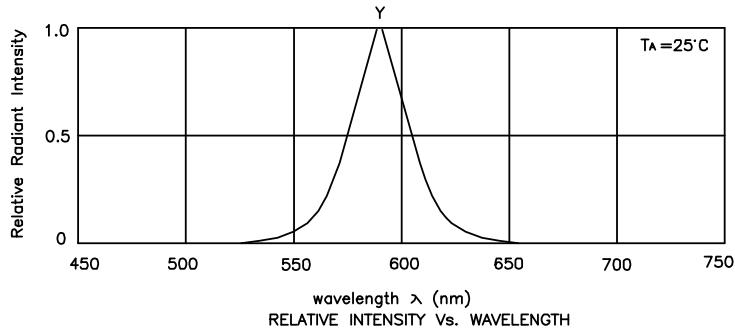
1. Wavelength: +/-1nm.

## Absolute Maximum Ratings at TA=25°C

| Parameter                  | Yellow              | Units |
|----------------------------|---------------------|-------|
| Power dissipation          | 120                 | mW    |
| Forward Voltage            | 14                  | 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.



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