

Part Number: L-173YD

YELLOW

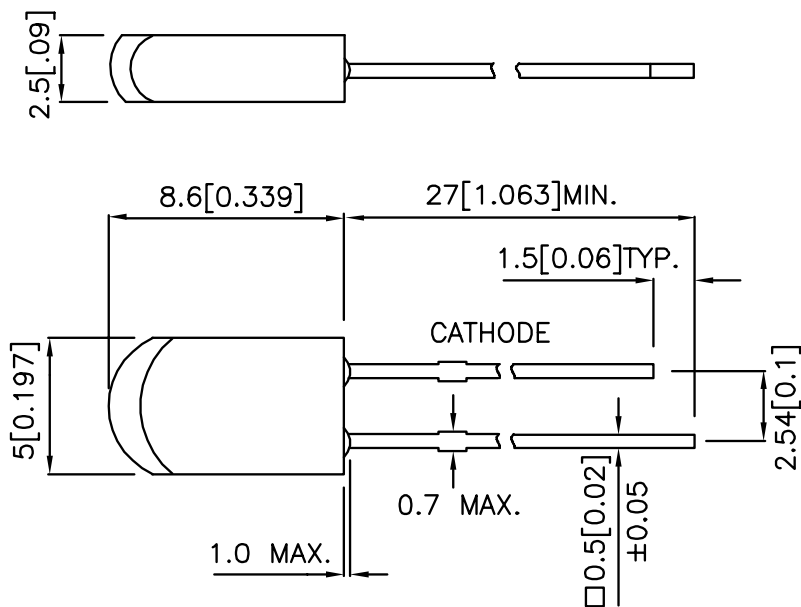
### Features

- LOW POWER CONSUMPTION.
- I.C. COMPATIBLE.
- ROUNDED END RECTANGULAR SHAPE.
- LONG LIFE - SOLID STATE RELIABILITY.
- 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>@ 10mA |      | Viewing<br>Angle [1] |
|----------|--------------------|-----------------|------------------------|------|----------------------|
|          |                    |                 | Min.                   | Typ. | 2 θ 1/2              |
| L-173YD  | YELLOW (GaAsP/GaP) | YELLOW DIFFUSED | 1.8                    | 5    | 100°                 |

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           |
|--------------------|--------------------------|--------|------|------|-------|---------------------------|
| λ <sub>peak</sub>  | Peak Wavelength          | Yellow | 590  |      | nm    | I <sub>F</sub> =20mA      |
| λ <sub>D</sub> [1] | Dominant Wavelength      | Yellow | 588  |      | nm    | I <sub>F</sub> =20mA      |
| Δλ <sub>1/2</sub>  | Spectral Line Half-width | Yellow | 35   |      | nm    | I <sub>F</sub> =20mA      |
| C                  | Capacitance              | Yellow | 20   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub> [2] | Forward Voltage          | Yellow | 2.1  | 2.5  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>     | Reverse Current          | Yellow |      | 10   | uA    | V <sub>R</sub> = 5V       |

Notes:

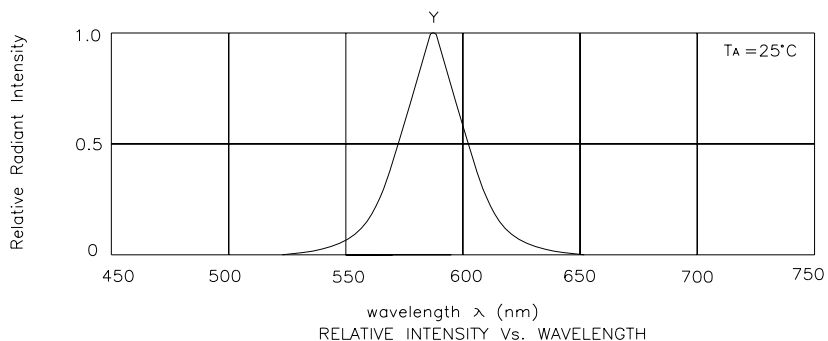
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

| Parameter                       | Yellow              | Units |
|---------------------------------|---------------------|-------|
| Power dissipation               | 75                  | mW    |
| DC Forward Current              | 30                  | mA    |
| Peak Forward Current [1]        | 140                 | 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. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



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