

L53SYC SUPER BRIGHT YELLOW

L53SYT SUPER BRIGHT YELLOW

L53SYD SUPER BRIGHT YELLOW

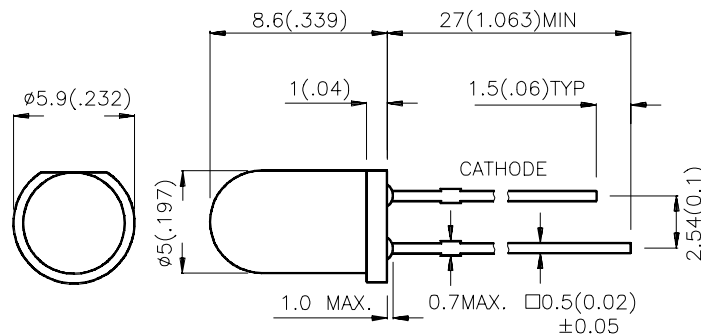
### Features

- ULTRA BRIGHTNESS.
- BOTH DIFFUSED AND WATER CLEAR LENS ARE AVAILABLE.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.

### Description

The Super Bright Yellow source color devices are made with DH InGaAlP on GaAs substrate 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>@ 20 mA |      | Viewing<br>Angle |
|----------|-------------------------------|--------------------|---------------------|------|------------------|
|          |                               |                    | Min.                | Typ. | 2θ1/2            |
| L53SYC   | SUPER BRIGHT YELLOW (InGaAlP) | WATER CLEAR        | 400                 | 1200 | 30°              |
| L53SYT   |                               | YELLOW TRANSPARENT | 400                 | 1200 | 30°              |
| L53SYD   |                               | YELLOW DIFFUSED    | 100                 | 400  | 60°              |

Note:

1. θ1/2 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

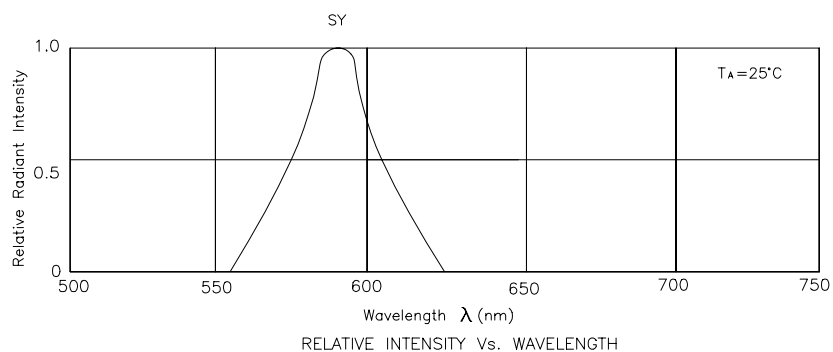
| Symbol            | Parameter               | Device              | Typ. | Max. | Units | Test Conditions |
|-------------------|-------------------------|---------------------|------|------|-------|-----------------|
| λ <sub>peak</sub> | Peak Wavelength         | Super Bright Yellow | 590  |      | nm    | IF=20mA         |
| λ <sub>D</sub>    | Dominate Wavelength     | Super Bright Yellow | 588  |      | nm    | IF=20mA         |
| Δλ <sub>1/2</sub> | Spectral Line Halfwidth | Super Bright Yellow | 28   |      | nm    | IF=20mA         |
| C                 | Capacitance             | Super Bright Yellow | 25   |      | pF    | VF=0V;f=1MHz    |
| V <sub>F</sub>    | Forward Voltage         | Super Bright Yellow | 2.0  | 2.5  | V     | IF=20mA         |
| I <sub>R</sub>    | Reverse Current         | Super Bright Yellow |      | 10   | uA    | VR = 5V         |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

| Parameter                     | Super Bright Yellow | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 125                 | mW    |
| DC Forward Current            | 30                  | mA    |
| Peak Forward Current [1]      | 175                 | mA    |
| Reverse Voltage               | 5                   | V     |
| Operating/Storage Temperature | -40°C To +85°C      |       |
| Lead Solder Temperature [2]   | 260°C For 5 Seconds |       |

Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



## Super Bright Yellow L53SYD,L53SYC,L53SYT

