

W53GD GREEN

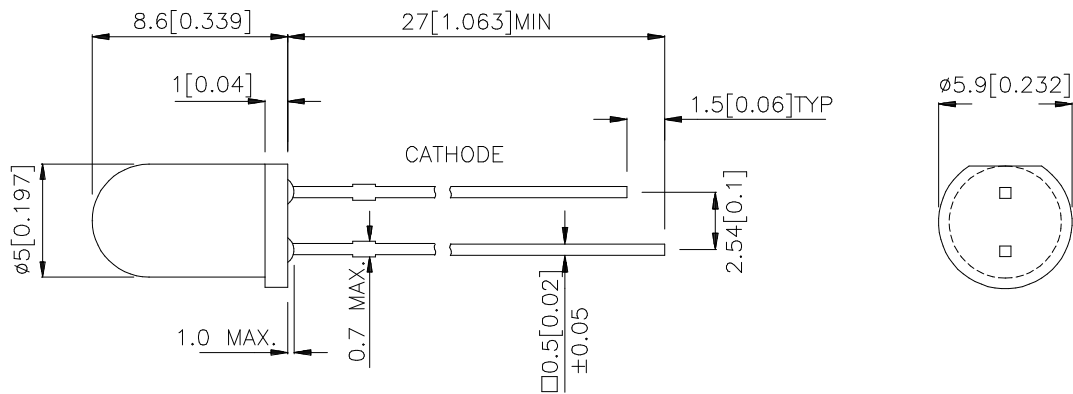
### Features

- 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.

### Description

The Green source color devices are made with Gallium Phosphide Green 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>@10mA |      | Viewing<br>Angle |
|----------|------------|----------------|-------------------|------|------------------|
|          |            |                | Min.              | Typ. | 2 $\theta$ 1/2   |
| W53GD    | GREEN(GaP) | GREEN DIFFUSED | 5                 | 20   | 30°              |

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 T<sub>A</sub>=25°C

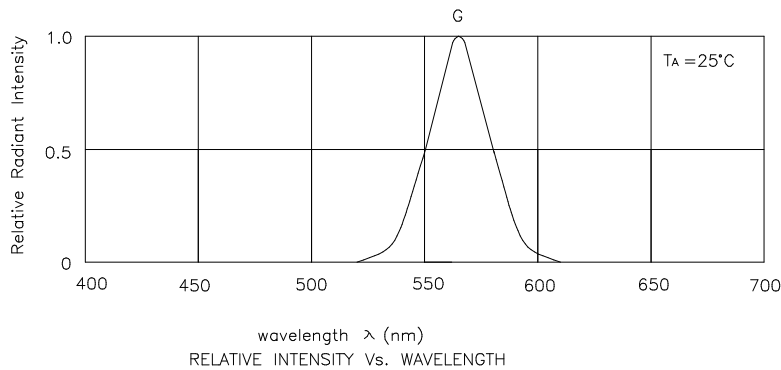
| Symbol                | Parameter                | Device | Typ. | Max. | Units | Test Conditions            |
|-----------------------|--------------------------|--------|------|------|-------|----------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Green  | 565  |      | nm    | I <sub>F</sub> =20mA       |
| $\lambda_D$           | Dominate Wavelength      | Green  | 568  |      | nm    | I <sub>F</sub> =20mA       |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Green  | 30   |      | nm    | I <sub>F</sub> =20mA       |
| C                     | Capacitance              | Green  | 15   |      | pF    | V <sub>F</sub> = 0V;f=1MHz |
| V <sub>F</sub>        | Forward Voltage          | Green  | 2.2  | 2.5  | V     | I <sub>F</sub> =20mA       |
| I <sub>R</sub>        | Reverse Current          | Green  |      | 10   | uA    | V <sub>R</sub> = 5V        |

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

| Parameter                     | Green               | Units |
|-------------------------------|---------------------|-------|
| Power dissipation             | 105                 | mW    |
| DC Forward Current            | 25                  | 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 5 Seconds |       |

Notes:

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



## Green W53GD

