

WP1002YD

YELLOW

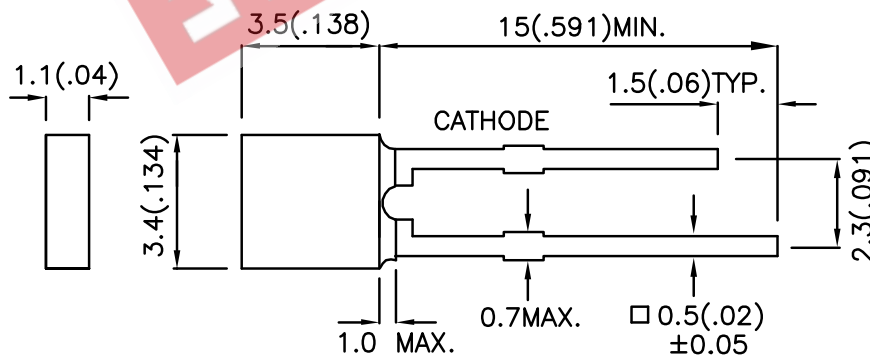
Features

- LOW POWER CONSUMPTION.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- SUITABLE FOR LEVEL INDICATOR.
- 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) @ 10mA | | Viewing Angle |
|----------|--------------------|-----------------|--------------------|------|------------------|
| | | | Min. | Typ. | θ1/2 |
| WP1002YD | YELLOW (GaAsP/GaP) | YELLOW DIFFUSED | 0.4 | 2.5 | 110° |

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 TA=25°C

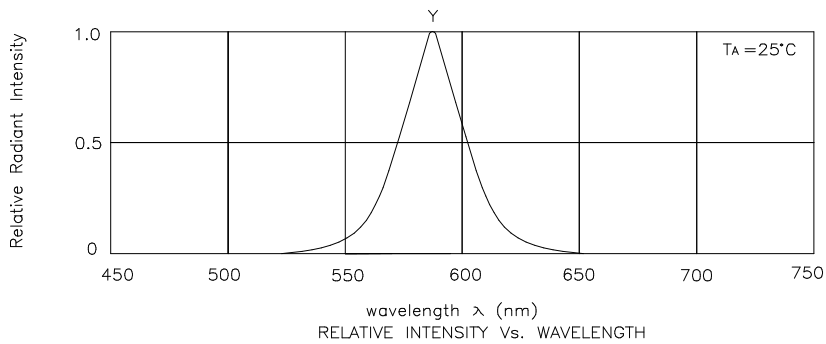
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|--------------------------|--------|------|------|-------|---------------------------|
| λ _{peak} | Peak Wavelength | Yellow | 590 | | nm | I _F =20mA |
| λ _D | Dominant Wavelength | Yellow | 588 | | nm | I _F =20mA |
| Δλ _{1/2} | Spectral Line Half-width | Yellow | 35 | | nm | I _F =20mA |
| C | Capacitance | Yellow | 20 | | pF | V _F =0V;f=1MHz |
| V _F | Forward Voltage | Yellow | 2.1 | 2.5 | V | I _F =20mA |
| I _R | Reverse Current | Yellow | | 10 | uA | V _R = 5V |

Absolute Maximum Ratings at TA=25°C

| Parameter | Yellow | Units |
|---------------------------------|---------------------|-------|
| Power dissipation | 105 | 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 | |

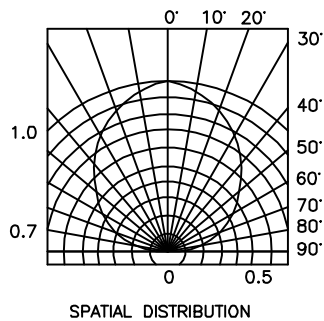
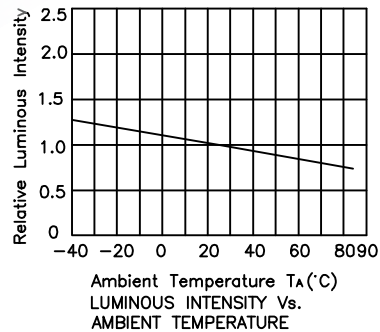
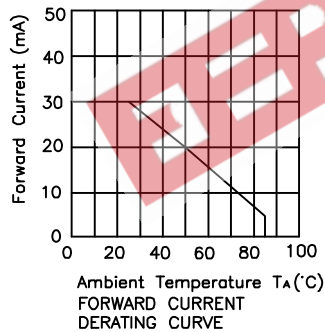
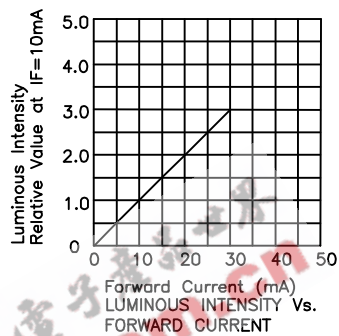
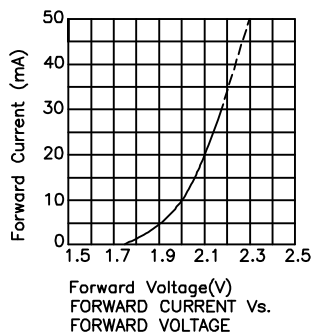
Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.
- 5mm below package base.



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Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
2. Luminous Intensity: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.