

### 2mmx5mm RECTANGULAR SOLID LAMP

WP103YDT

YELLOW

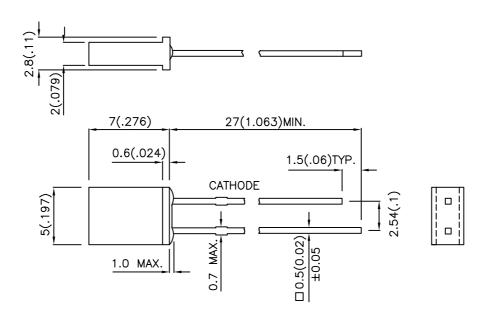
#### **Features**

- 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

- 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.

SPEC NO: DSAF2574 APPROVED: J. Lu REV NO: V.1 CHECKED: Allen Liu DATE: APR/19/2005 DRAWN: Y.W.WANG PAGE: 1 OF 3 ERP:1101000412-01

# Kingbright

# **Selection Guide**

| Part No. | Dice               | Lens Type       | Iv (mcd)<br>@ 10mA |      | Viewing<br>Angle |
|----------|--------------------|-----------------|--------------------|------|------------------|
|          |                    |                 | Min.               | Тур. | 2 θ 1/2          |
| WP103YDT | YELLOW (GaAsP/GaP) | YELLOW DIFFUSED | 1                  | 4    | 110°             |

#### Note:

# Electrical / Optical Characteristics at Ta=25°C

| Symbol | Parameter                | Device | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|--------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | Yellow | 590  |      | nm    | IF=20mA         |
| λD     | Dominant Wavelength      | Yellow | 588  |      | nm    | IF=20mA         |
| Δλ1/2  | Spectral Line Half-width | Yellow | 35   |      | nm    | IF=20mA         |
| С      | Capacitance              | Yellow | 20   |      | pF    | VF=0V;f=1MHz    |
| VF     | Forward Voltage          | Yellow | 2.1  | 2.5  | V     | I==20mA         |
| lR     | Reverse Current          | Yellow |      | 10   | uA    | VR= 5V          |

# Absolute Maximum Ratings at Ta=25°C

| Parameter                       | Yellow  |    |  |  |
|---------------------------------|---|----|--|--|
| 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]     | ad Solder Temperature [2] 260°C For 3 Seconds |    |  |  |
| Lead Solder Temperature [3]     | 260°C For 5 Seconds                           |    |  |  |

#### Notes

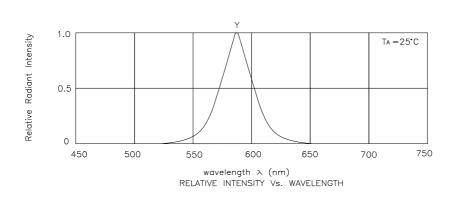
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

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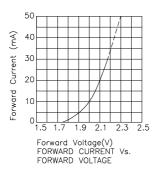
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

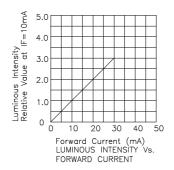
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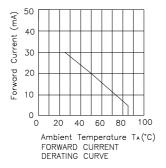


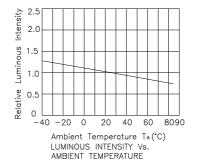
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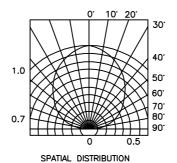
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#### Remarks

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: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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