### T-1 (3mm) SOLID STATE LAMP

WP34YD

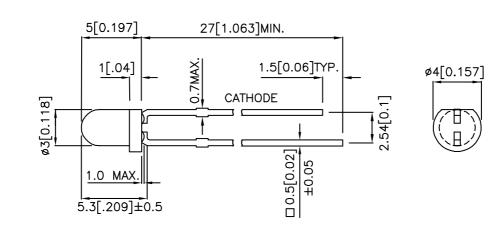
YELLOW

Features •LOW POWER CONSUMPTION. •POPULAR T-1 DIAMETER PACKAGE. •GENERAL PURPOSE LEADS. •RELIABLE AND RUGGED. •LONG LIFE - SOLID STATE RELIABILITY. •AVAILABLE ON TAPE AND REEL. •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.

#### SPEC NO: DSAF0516 APPROVED: J. Lu

REV NO: V.2 CHECKED: Allen Liu DATE: APR/16/2005 DRAWN: Y.W.WANG PAGE: 1 OF 4 ERP:1101003660

| Selection Guide |                    |                 |                    |      |                  |
|-----------------|--------------------|-----------------|--------------------|------|------------------|
| Part No.        | Dice               | Lens Type       | lv (mcd)<br>@ 10mA |      | Viewing<br>Angle |
|                 |                    |                 | Min.               | Тур. | 201/2            |
| WP34YD          | YELLOW (GaAsP/GaP) | YELLOW DIFFUSED | 1.8                | 6    | $60^{\circ}$     |

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 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     | IF=20mA         |
| IR     | Reverse Current          | Yellow |      | 10   | uA    | VR = 5V         |

### Absolute Maximum Ratings at TA=25°C

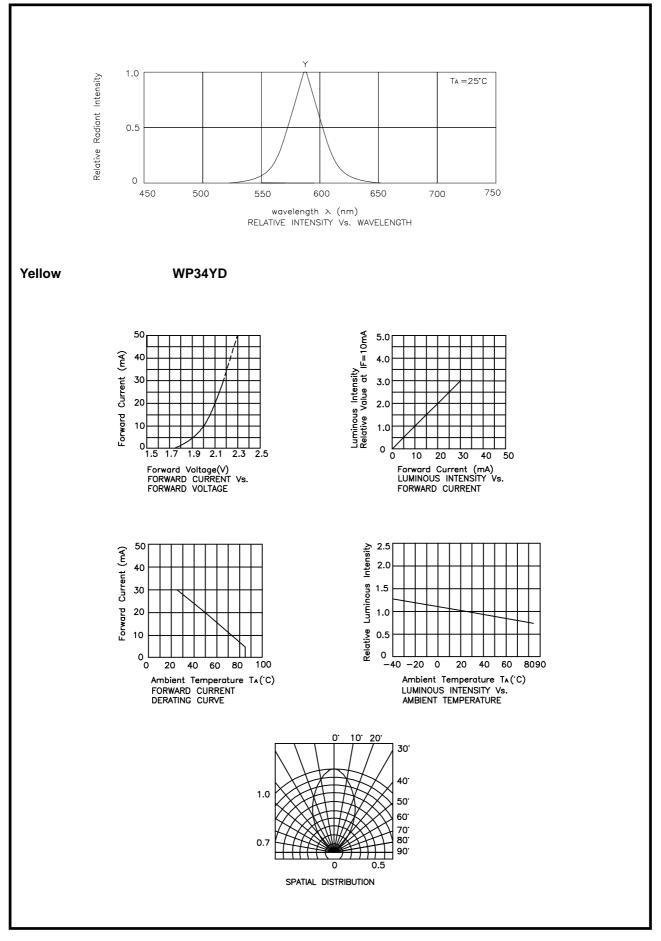
| Parameter                       | Yellow              | Units |  |  |
|---------------------------------|---------------------|-------|--|--|
| Power dissipation               | 105                 | mW    |  |  |
| DC Forward Current              | 30                  | mA    |  |  |
| Peak Forward 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:

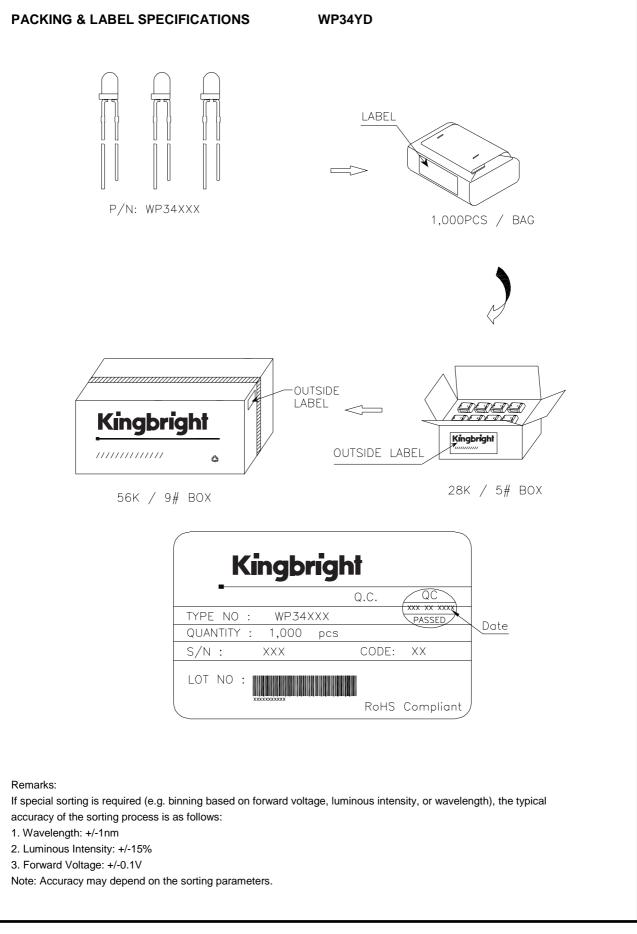
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 2mm below package base.

3. 5mm below package base.



REV NO: V.2 CHECKED: Allen Liu DATE: APR/16/2005 DRAWN: Y.W.WANG PAGE: 3 OF 4 ERP:1101003660



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