

### 4mm CYLINDRICAL LED LAMP

WP1413YDT

YELLOW

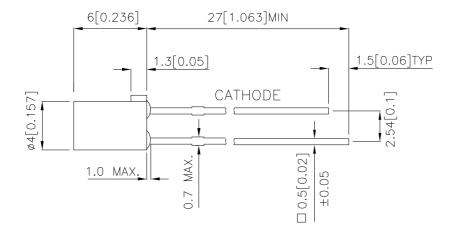
#### **Features**

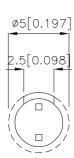
- CYLINDRICAL TYPE, FLAT TOP.
- CONVEX CATHODE MARK ON BODY.
- LOW POWER CONSUMPTION.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

## **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: DSAF2544
 REV NO: V.1
 DATE:APR/16/2005
 PAGE: 1 OF 3

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: B.H.LI
 ERP: 1101001471

# Kingbright

## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 10mA		Viewing Angle
			Min.	Тур.	201/2
WP1413YDT	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	1	3	100°

#### 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	IF=20mA
I <sub>R</sub>	Reverse Current	All		10	uA	V <sub>R</sub> = 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	se Voltage 5			
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:

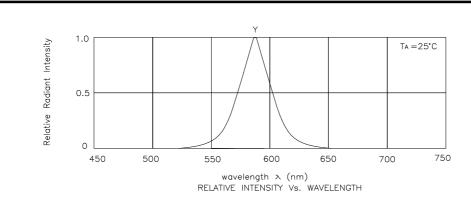
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

 SPEC NO: DSAF2544
 REV NO: V.1
 DATE:APR/16/2005
 PAGE: 2 OF 3

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: B.H.LI
 ERP: 1101001471

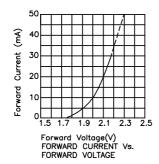
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

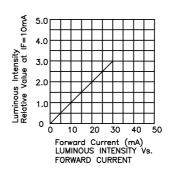
## Kingbright

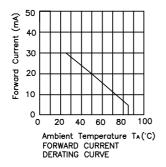


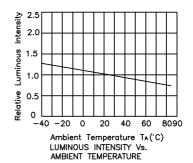
Yellow

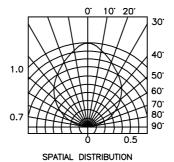
#### **WP1413YDT**











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.

 SPEC NO: DSAF2544
 REV NO: V.1
 DATE:APR/16/2005
 PAGE: 3 OF 3

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: B.H.LI
 ERP: 1101001471