

## T-1 3/4 (5mm) CYLINDRICAL LED LAMP

WP483HDT

BRIGHT RED

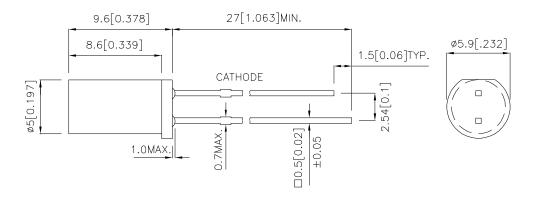
## **Features**

- ullet CYLINDRICAL TYPE, TOP DIFFUSED.
- •LOW POWER CONSUMPTION.
- •I.C. COMPATIBLE.
- •RELIABLE AND RUGGED.
- •LONG LIFE SOLID STATE RELIABILITY.
- •AVAILABLE ON TAPE AND REEL.
- RoHS COMPLIANT.

## **Description**

The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.

## **Package Dimensions**



- 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: DSAF2547 APPROVED: J. Lu

**REV NO: V.1** CHECKED: Allen Liu

DATE: APR/16/2005

PAGE: 1 OF 3 DRAWN: B.H.LI ERP: 1101004757



## **Selection Guide**

Part No.	Dice	Lens Type	Iv (mcd) @ 10 mA		Viewing Angle
			Min.	Тур.	201/2
WP483HDT	BRIGHT RED (GaP)	RED DIFFUSED	0.4	1	100°

## Note:

# Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Bright Red	700		nm	IF=20mA
λD	Dominant Wavelength	Bright Red	660		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Bright Red	45		nm	IF=20mA
С	Capacitance	Bright Red	40		pF	VF=0V;f=1MHz
VF	Forward Voltage	Bright Red	2.25	2.5	V	IF=20mA
lR	Reverse Current	Bright Red		10	uA	VR = 5V

## Absolute Maximum Ratings at Ta=25°C

Parameter	Bright Red	Units		
Power dissipation	120	mW		
DC Forward Current	25	mA		
Peak Forward Current [1]	130	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:

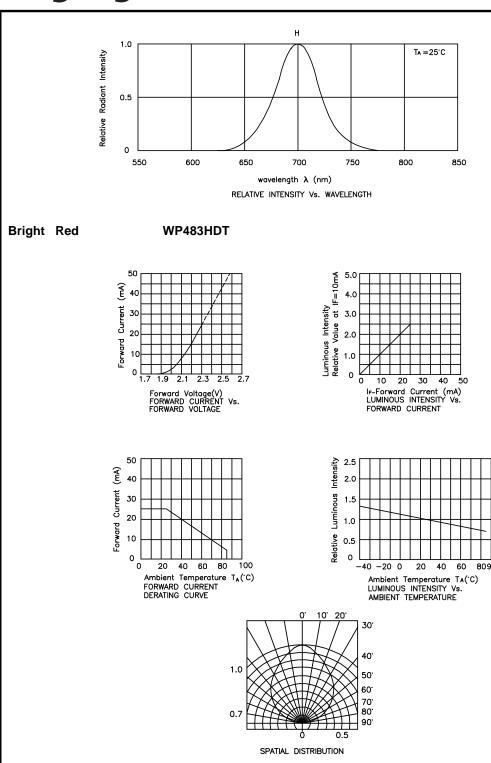
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

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DATE: APR/16/2005 PAGE: 2 OF 3
DRAWN: B.H.LI ERP: 1101004757

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

# Kingbright



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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PAGE: 3 OF 3 DRAWN: B.H.LI ERP: 1101004757