

### 2mmx5mm RECTANGULAR SOLID LAMP

WP103HDT

BRIGHT RED

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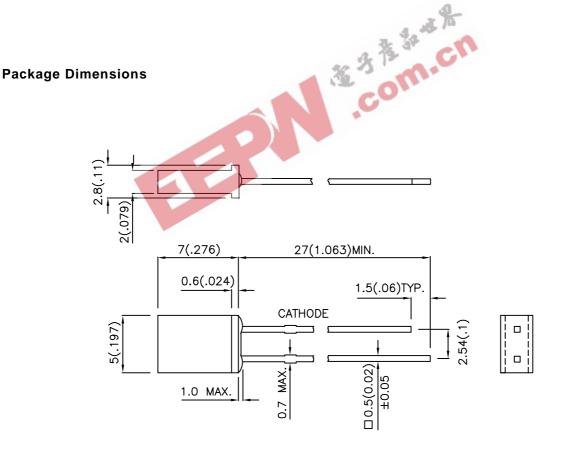
ERP:1101000374-01

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



- Notes:
  1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±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: DSAF2571 **REV NO: V.1** DATE: APR/16/2005 APPROVED: J. Lu CHECKED: Allen Liu DRAWN: Y.W.WANG

# **Kingbright**

## **Selection Guide**

Part No.	Dice	Lens Type	Iv (mcd) @ 10mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
WP103HDT	BRIGHT RED (GaP)	RED DIFFUSED	0.4	1	110°

#### 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	a. 30	nm	IF=20mA
С	Capacitance	Bright Red	40	13	pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Bright Red	2.25	2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	Bright Red	C	10	uA	VR = 5V

# Absolute Maximum Ratings at TA=25°C

Parameter	Bright Red			
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]	nperature [2] 260°C For 3 Seconds			
Lead Solder Temperature [3]	260°C For 5 Seconds			

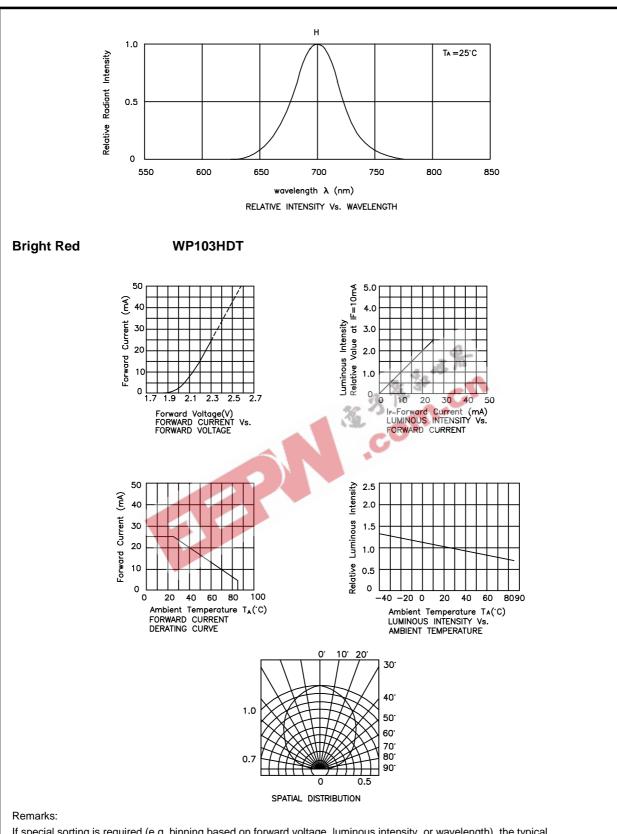
### Notes:

- 1.1/10 Duty Cycle, 0.1ms Pulse Width.
   2.2mm below package base.
   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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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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