### Kingbright

### 2mm FLAT TOP LED LAMP

WP13HD

BRIGHT RED

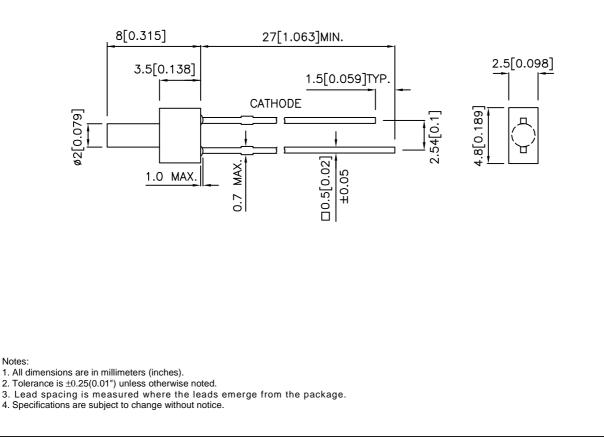
#### Features

MOUNTS FLUSH WITH PANEL.
LOW POWER CONSUMPTION.
SUITABLE FOR AUDIO PANEL INDICATOR.
FITS 2mm HOLE IN PANEL UP TO 3.5mm (.138").
LONG LIFE - SOLID STATE RELIABILITY.
ROHS COMPLIANT.

#### Description

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

#### Package Dimensions



SPEC NO: DSAF2529 APPROVED: J. Lu REV NO: V.1 CHECKED: Allen Liu DATE: APR/18/2005 DRAWN: W.J.ZHU PAGE: 1 OF 3 ERP:1101009210

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Selection Guid	le				
Part No.	Dice	Lens Type	lv (mcd) @ 10mA		Viewing Angle
			Min.	Тур.	2 <del>0</del> 1/2
WP13HD	BRIGHT RED (GaP)	RED DIFFUSED	0.4	1.5	70°

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	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
IR	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			

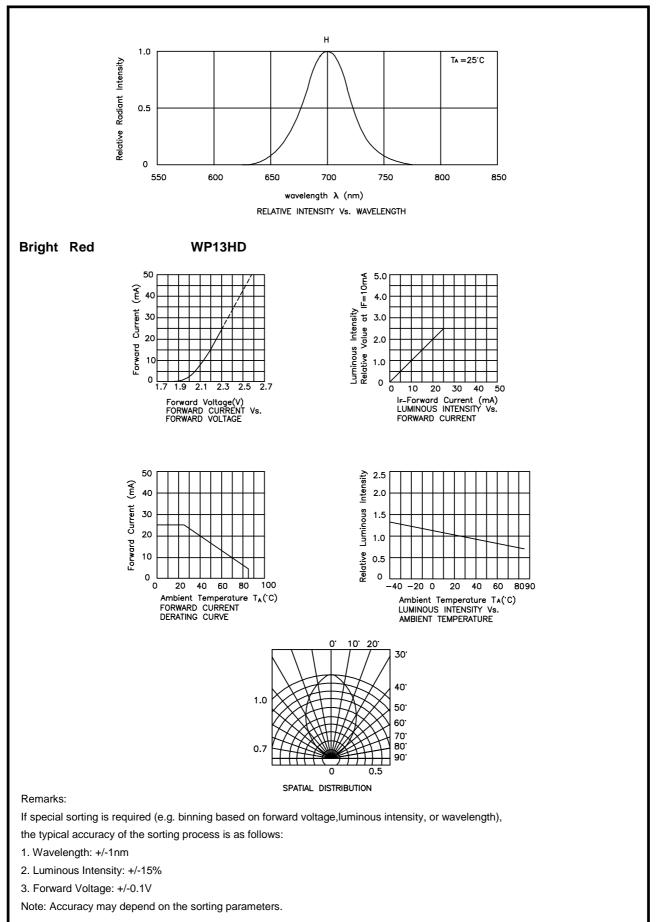
Notes:

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

2. 2mm below package base.

3. 5mm below package base.

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