

## 2.5x5mm RECTANGULAR SOLID LAMP

WP383IDT

HIGH EFFICIENCY RED

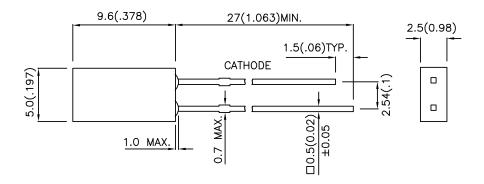
### **Features**

- LOW POWER CONSUMPTION.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- SUITABLE FOR LEVEL INDICATOR.
- LONG LIFE SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

## Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange 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: DSAF0510 APPROVED: J. Lu

**REV NO: V.2** 

CHECKED: Allen Liu

**DATE: APR/21/2005** DRAWN: S.H.CHEN

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ERP:1101003861



## **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 10mA		Viewing Angle
			Min.	Тур.	201/2
WP383IDT	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	3	5	110°

# Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	IF=20mA
λD	Dominant Wavelength	High Efficiency Red	625		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	IF=20mA
С	Capacitance	High Efficiency Red	15		pF	VF=0V;f=1MHz
VF	Forward Voltage	High Efficiency Red	2.0	2.5	V	IF=20mA
lR	Reverse Current	High Efficiency Red		10	uA	VR = 5V

# Absolute Maximum Ratings at T<sub>A</sub>=25°C

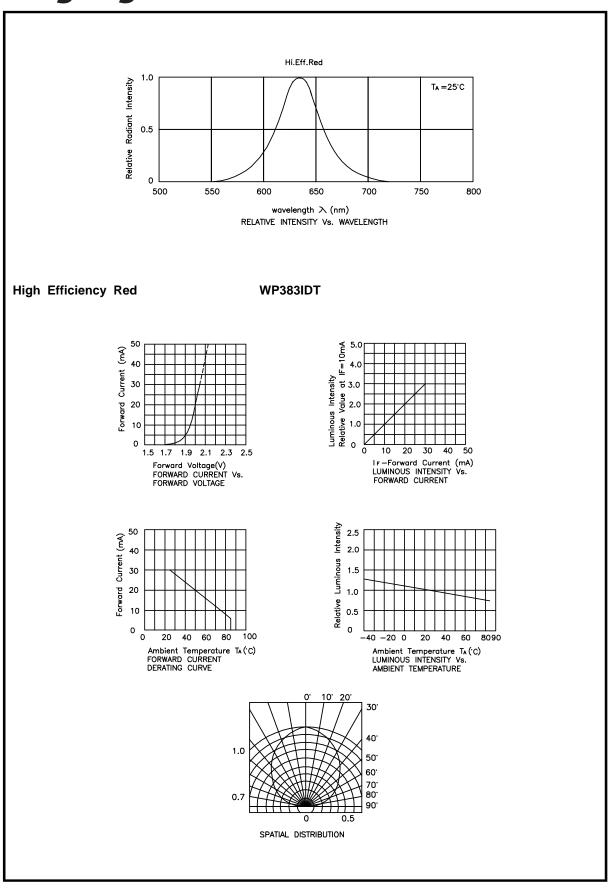
Parameter	High Efficiency Red	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2] 260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds	

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

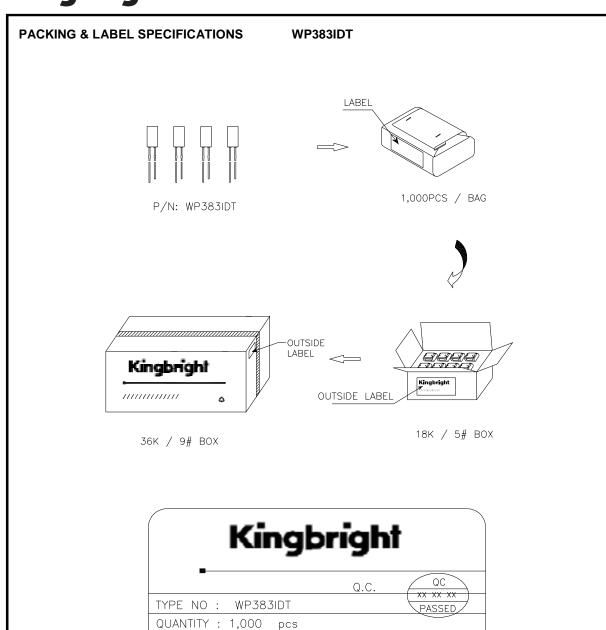
# Kingbright



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### 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:

XXX

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

S/N:

LOT NO

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CODE:

XX

RoHS Compliant

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