

T-1 (3mm) SOLID STATE LAMP

WP1154IT

HIGH EFFICIENCY RED

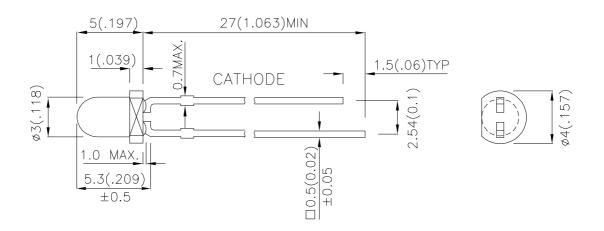
Features

- •LOW POWER CONSUMPTION.
- •POPULAR T-1 DIAMETER PACKAGE.
- •GENERAL PURPOSE LEADS.
- •RELIABLE AND RUGGED.
- •LONG LIFE SOLID STATE RELIABILITY.
- •AVAILABLE ON TAPE AND REEL.
- •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 ±0.25(0.01") unless otherwise noted.

 3. Lead spacing is measured where the lead emerge from the package.

 4. Specifications are subject to change without notice.

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
WP1154IT	HIGH EFFICIENCY RED (GaAsP/GaP)	RED TRANSPARENT	18	60	50°

Note:

Electrical / Optical Characteristics at Ta=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 Ta=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			

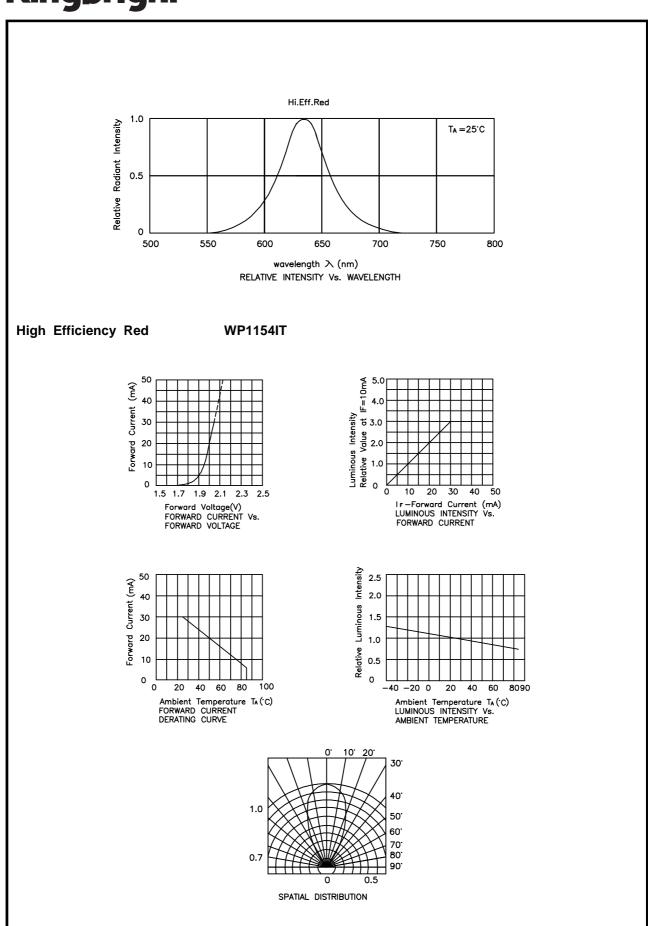
Notes:

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

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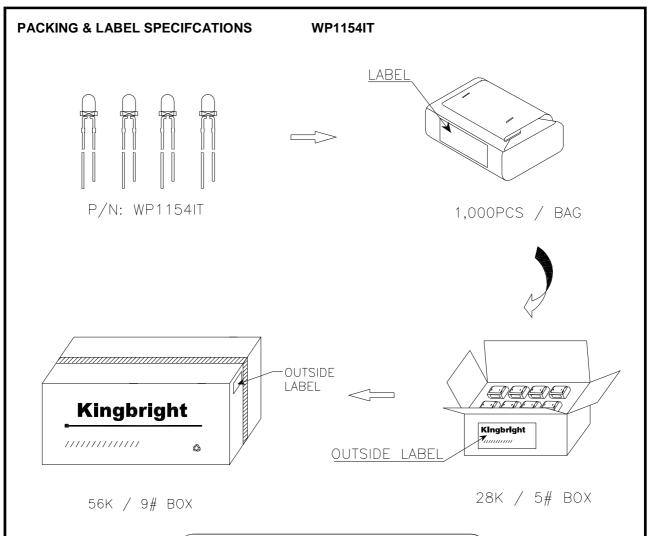
 $^{1. \}theta^{1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2} \right)$

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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