

WP1154IT

HIGH EFFICIENCY RED

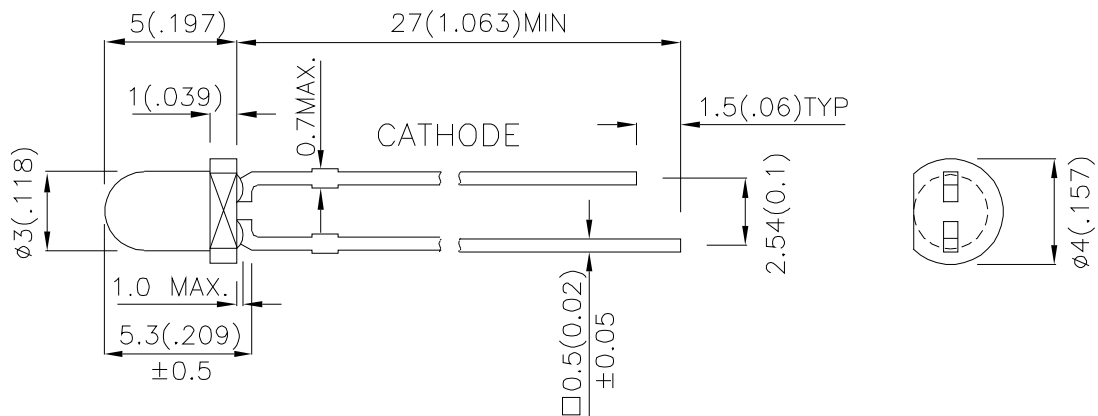
### Features

- 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



#### Notes:

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 lead emerge from the package.
4. Specifications are subject to change without notice.

## Selection Guide

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

Note:

1. θ1/2 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	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red	627		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominant Wavelength	High Efficiency Red	625		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	High Efficiency Red	45		nm	I <sub>F</sub> =20mA
C	Capacitance	High Efficiency Red	15		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	High Efficiency Red	2.0	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	High Efficiency Red		10	uA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at TA=25°C

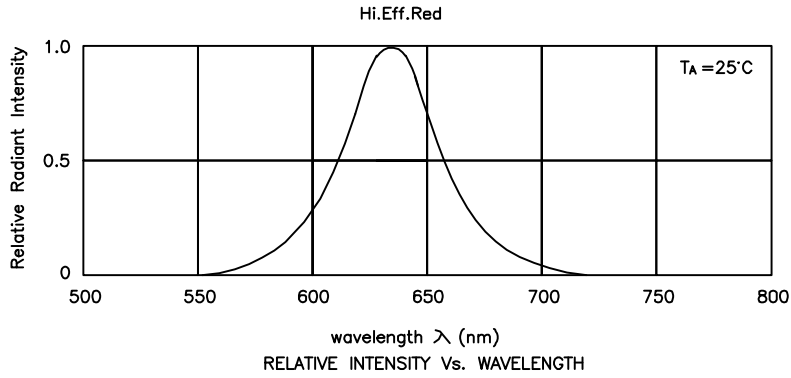
Parameter	High Efficiency Red	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

Notes:

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

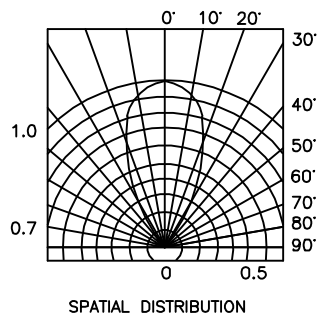
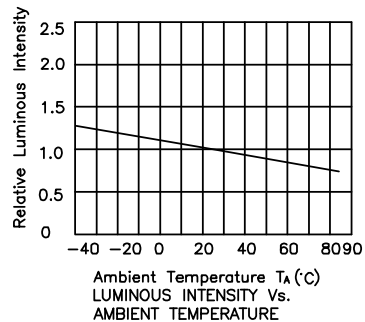
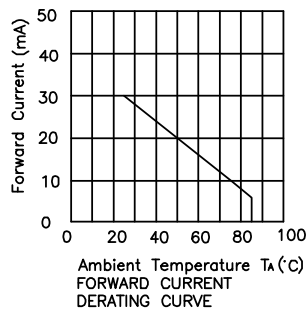
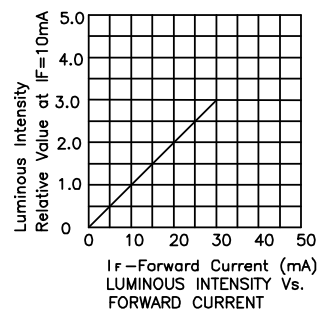
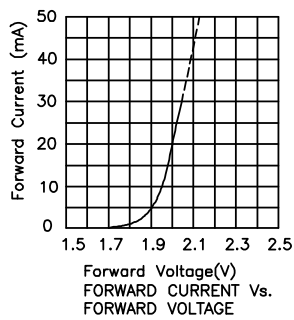
2. 2mm below package base.

3. 5mm below package base.



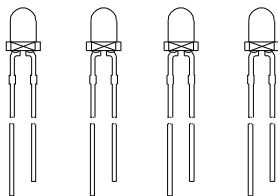
## High Efficiency Red

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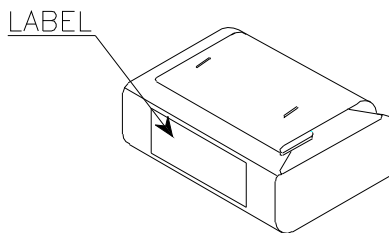
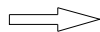


## PACKING & LABEL SPECIFICATIONS

WP1154IT



P/N: WP1154IT

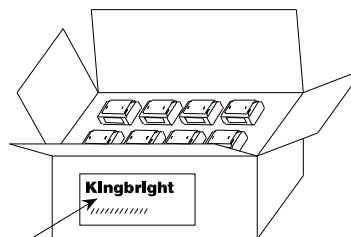


1,000PCS / BAG




56K / 9# BOX

OUTSIDE LABEL



28K / 5# BOX

OUTSIDE LABEL

<b>Kingbright</b>				
Q.C.	<table border="1"> <tr> <td>QC</td> </tr> <tr> <td>xx.xx.2005</td> </tr> <tr> <td>PASSED</td> </tr> </table>	QC	xx.xx.2005	PASSED
QC				
xx.xx.2005				
PASSED				
TYPE NO : WP1154IT				
QUANTITY : 1,000 pcs				
S/N : XXXX	CODE: XXX			
LOT NO  <small>xxxxxxxxxxxx</small>				
RoHS Compliant				

**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:

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

Note: Accuracy may depend on the sorting parameters.