#### T-1 3/4 (5mm) BI-LEVEL LED INDICATOR

Part Number: WP1503EB/2ID

High Efficiency Red

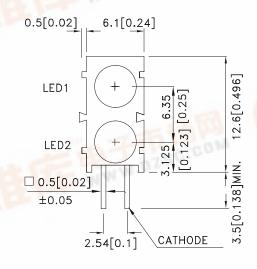
#### **Features**

- PRE-TRIMMED LEADS FOR PC BOARD MOUNTING.
- STACKABLE UNITS.
- COLORS CAN BE MIXED IN A SINGLE HOUSING.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- UL RATING: 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- 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

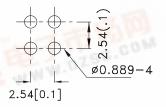


5.5[0.217]±0.5 2.54[0.1]

11[0.433]

4.5[0.177]±0.3







- 1. All dimensions are in millimeters (inches).
- Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- ead spacing is measured where the leads emerge from the package.

effications are subject to change without notice.







**REV NO: V.2** 

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#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 10mA		Viewing Angle [1]
		3,1	Min.	Тур.	201/2
WP1503EB/2ID	High Efficiency Red (GaAsP/GaP)	RED DIFFUSED	8	30	60°

- Notes: 1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value. 2. Luminous intensity/ luminous Flux: +/-15%.

### 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 [1]	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 [2]	Forward Voltage	High Efficiency Red	2	2.5	V	IF=20mA
lR	Reverse Current	High Efficiency Red		10	uA	V <sub>R</sub> = 5V

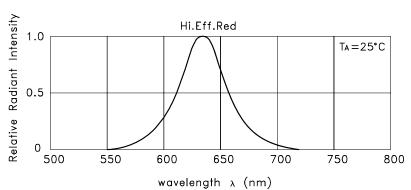
- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

Absolute maximum Natings at TA-25 G				
Parameter	High Efficiency Red	Units		
Power dissipation	75	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			

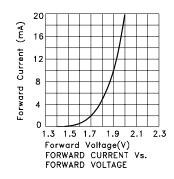
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

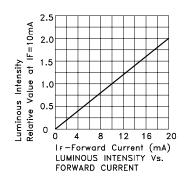
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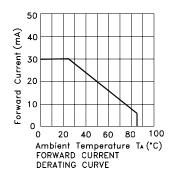


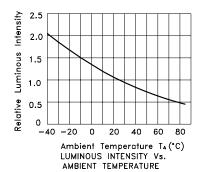
RELATIVE INTENSITY Vs. WAVELENGTH

### High Efficiency Red WP1503EB/2ID





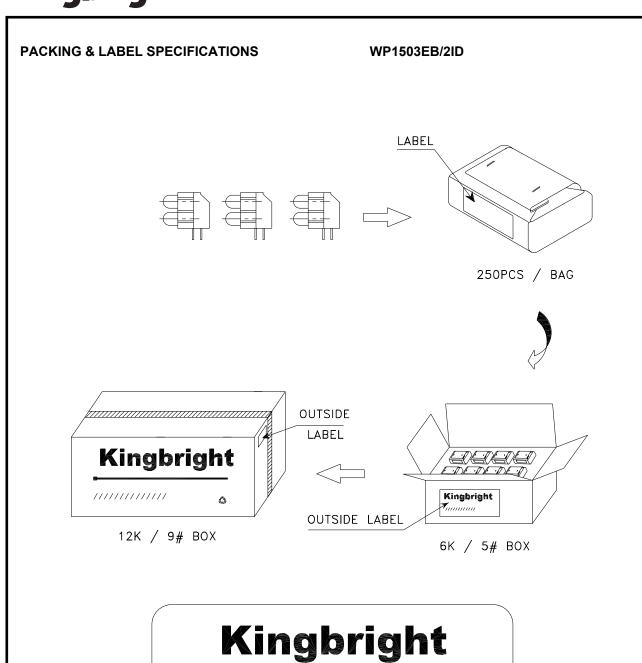


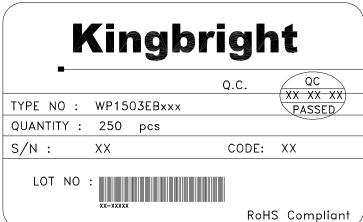


0° 10° 20° 30° 40° 50° 60° 70° 80° 90°

SPATIAL DISTRIBUTION

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