### T-1 3/4 (5mm) BI-COLOR RIGHT ANGLE LED INDICATOR

Part Number: WP59BL/EGW

High Efficiency Red Green

#### **Features**

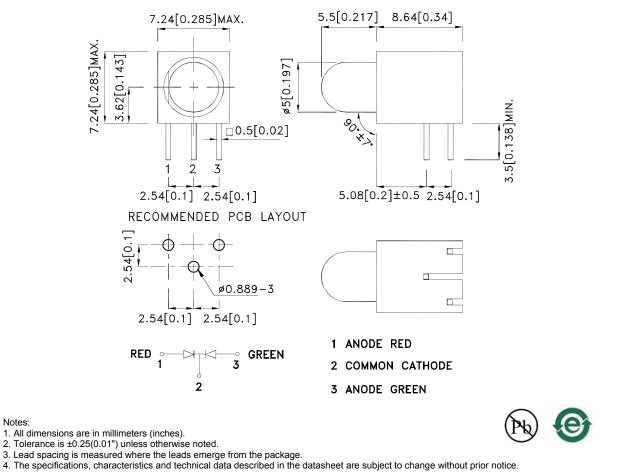
- Pre-trimmed leads for pc board mounting.
- Black case enhances contrast ratio.
- Wide viewing angle.
- High reliability life measured in years.
- Housing UL rating:94V-0.
- Housing material: type 66 nylon.
- · RoHS compliant.

#### Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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

#### **Package Dimensions**



Notes:

**REV NO: V.4** CHECKED: Allen Liu DATE: APR/08/2011 DRAWN: J.Yu

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#### **Selection Guide** Viewing lv (mcd) [2] @ 20mA Angle [1] Part No. Dice Lens Type 201/2 Min. Тур. High Efficiency Red (GaAsP/GaP) 50 100 WP59BL/EGW White Diffused $60^{\circ}$ Green (GaP) 20 60

Notes:

θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
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 Green	627 565		nm	I⊧=20mA
λD [1]	Dominant Wavelength	High Efficiency Red Green	625 568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Green	45 30		nm	IF=20mA
С	Capacitance	High Efficiency Red Green	15 15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red Green	2 2.2	2.5 2.5	V	I⊧=20mA
IR	Reverse Current	High Efficiency Red Green		10 10	uA	VR = 5V

Notes:

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

#### Absolute Maximum Ratings at TA=25°C

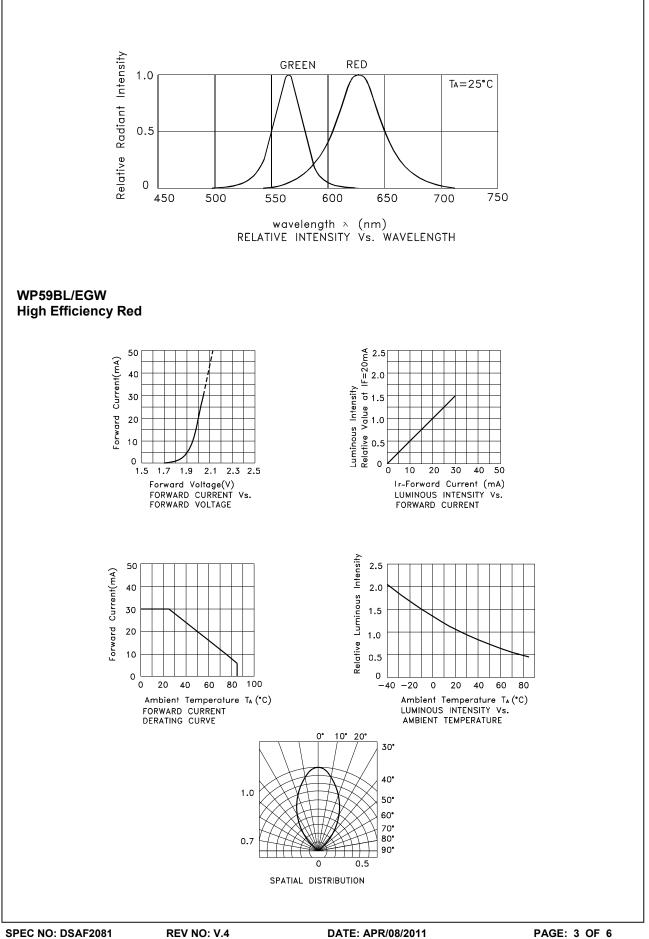
Parameter	High Efficiency Red	Green	Units	
Power dissipation	75	62.5	mW	
DC Forward Current	30	25	mA	
Peak Forward Current [1]	160	140	mA	
Reverse Voltage	5		V	
Operating / Storage Temperature	-4	0°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds			
Lead Solder Temperature [3]	260°C For 5 Seconds			

Notes:

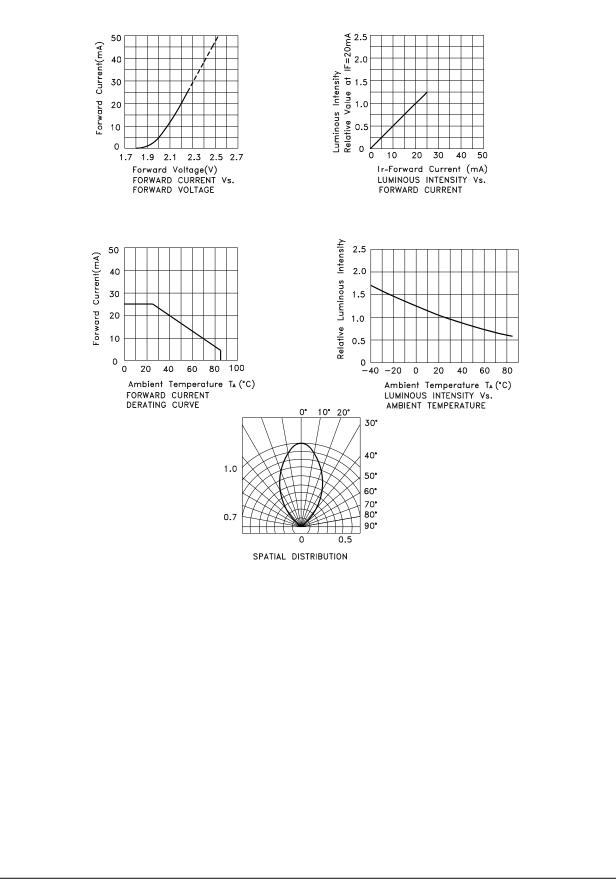
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

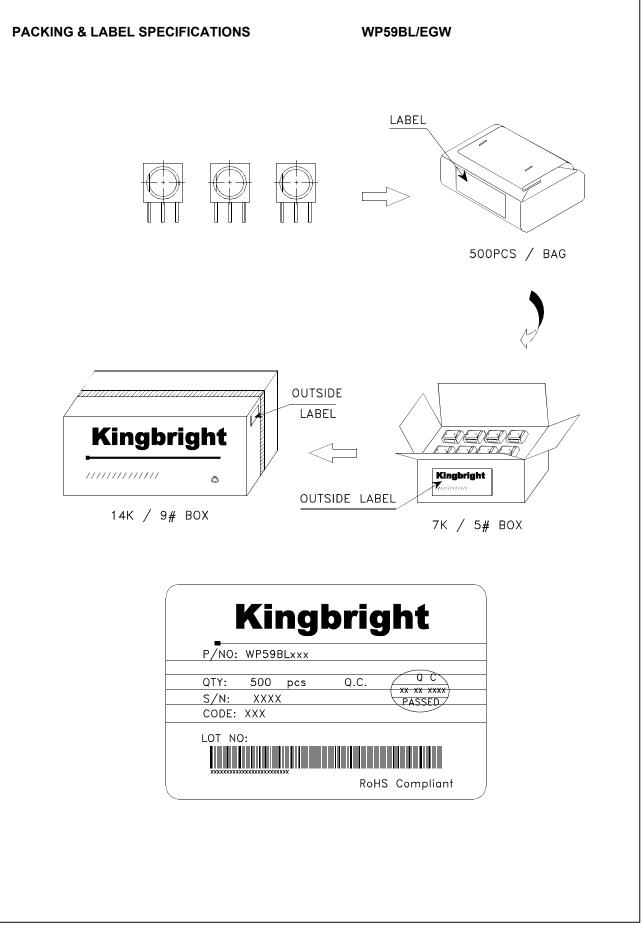
2. 2mm below package base.

3. 5mm below package base.



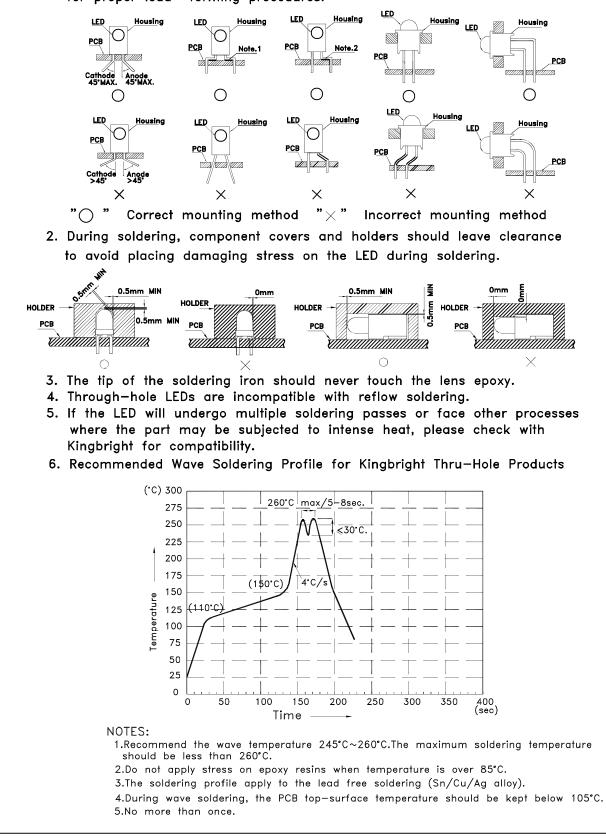
Green





#### PRECAUTIONS

1. The lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement. Lead-forming may be required to insure the lead pitch matches the hole pitch. Refer to the figure below for proper lead forming procedures.



DATE: APR/08/2011 DRAWN: J.Yu