

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

Part Number: WP7104ALUP/2ID-0L

High Efficiency Red

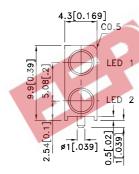
#### **Features**

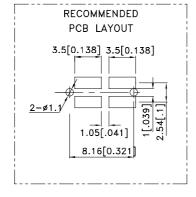
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- HOUSING MATERIAL: PPA.
- RoHS COMPLIANT.

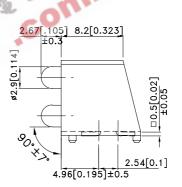
#### **Description**

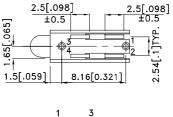
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

### **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 leads emerge from the package.4. Specifications are subject to change without notice.





SPEC NO: DSAH3814 APPROVED: WYNEC

**REV NO: V.1 CHECKED: Allen Liu**  DATE: MAY/09/2007 DRAWN: Y.L.LI

PAGE: 1 OF 5 ERP: 1102009882

#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] @ 10mA		Viewing Angle [1]
		,	Min.	Тур.	201/2
WP7104ALUP/2ID-0L	High Efficiency Red (GaAsP/GaP)	RED DIFFUSED	8	20	40°

#### Notes:

- 1. θ1/2 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	4.16	nm	IF=10mA
λD [1]	Dominant Wavelength	High Efficiency Red	625	30	nm	IF=10mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45	William	nm	IF=10mA
С	Capacitance	High Efficiency Red	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red	1.9	2.5	V	IF=10mA
lR	Reverse Current	High Efficiency Red		10	uA	V <sub>R</sub> =5V

#### Notes:

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

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

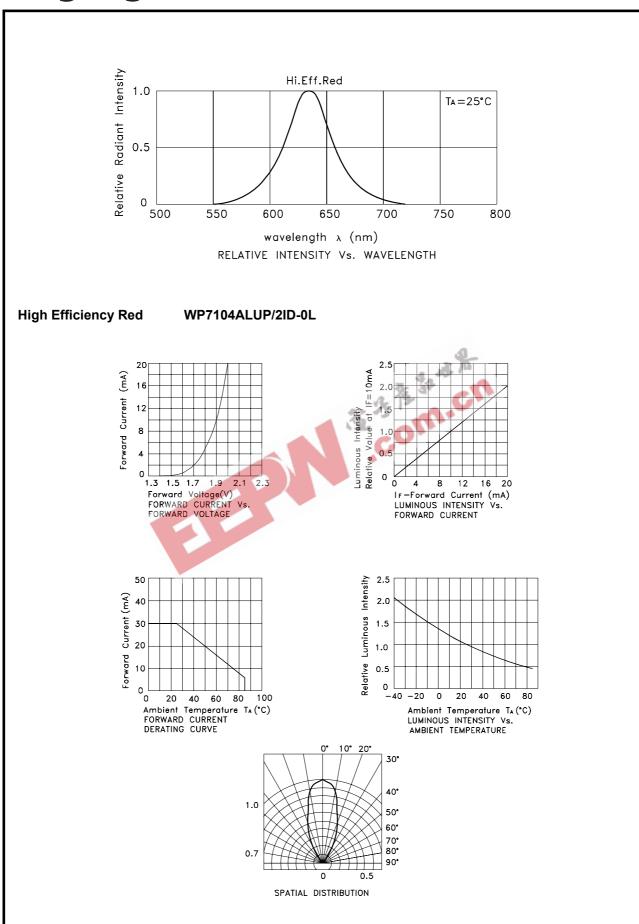
Parameter	High Efficiency Red	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	160	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

### Note:

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

 SPEC NO: DSAH3814
 REV NO: V.1
 DATE: MAY/09/2007
 PAGE: 2 OF 5

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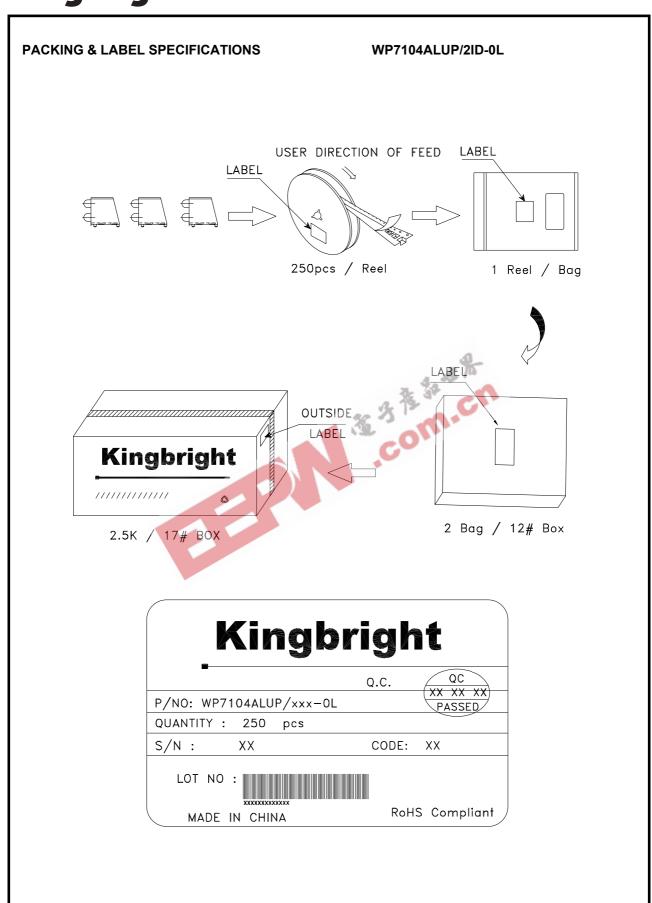
 SPEC NO: DSAH3814
 REV NO: V.1
 DATE: MAY/09/2007
 PAGE: 3 OF 5

 APPROVED: WYNEC
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### WP7104ALUP/2ID-0L Reflow Soldering Profile For Lead-free SMT Process. 10 s max 250 4°C/s mg 200 Temperature 30~50s 100 50 50 250 100 150 200 300 (sec) Time NOTES: 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature. 3. Number of reflow process shall be 2 times or less. 逐步<sup>表现,是</sup> **Tape Specifications** (Units: mm) TAPE $4.0 \pm 0.1$ 0.4±0.1 $2.0\pm0.1$ 16±0.1 ø1.55±0.05 6.5±0.1 $14.2\pm0.1$ 1.85±0.1 32±0.3 28.4±0.2 0.8-0.1 2±0.1 0.05±0.15 4.55+0.15 16±0.1 11.05±0.15 2.15±0.1 A-A SECTION

 SPEC NO: DSAH3814
 REV NO: V.1
 DATE: MAY/09/2007
 PAGE: 4 OF 5

 APPROVED: WYNEC
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