

### **Excellent Integrated System Limited**

Stocking Distributor

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Kingbright WP7104ALUP/2ID-0L

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

Part Number: WP7104ALUP/2ID-0L

High Efficiency Red

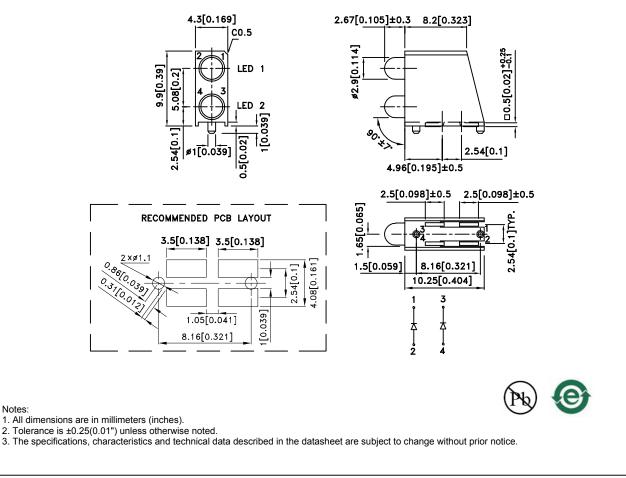
#### **Features**

- Black case enhances contrast ratio.
- Wide viewing angle.
- High reliability life measured in years.
- Moisture sensitivity level : level 3.
- Housing material: PPA.
- Housing UL rating : 94V-0.
- High temperature resistant housing.
- High glass transition temperature epoxy.
- RoHS compliant.

#### **Package Dimensions**

#### Description

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



SPEC NO: DSAH3814

Notes:



#### Selection Guide

Part No.	Dice	Lens Type	Dice Lens Type Iv (mcd) [2] @ 10mA			Viewing Angle [1]
			Min.	Тур.	201/2	
WP7104ALUP/2ID-0L	High Efficiency Red (GaAsP/GaP)	Red Diffused	12	30	40°	
			*10	*20		

Notes:

1. 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%.

\*Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

#### 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	617		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	VR = 5V

Notes:

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

3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

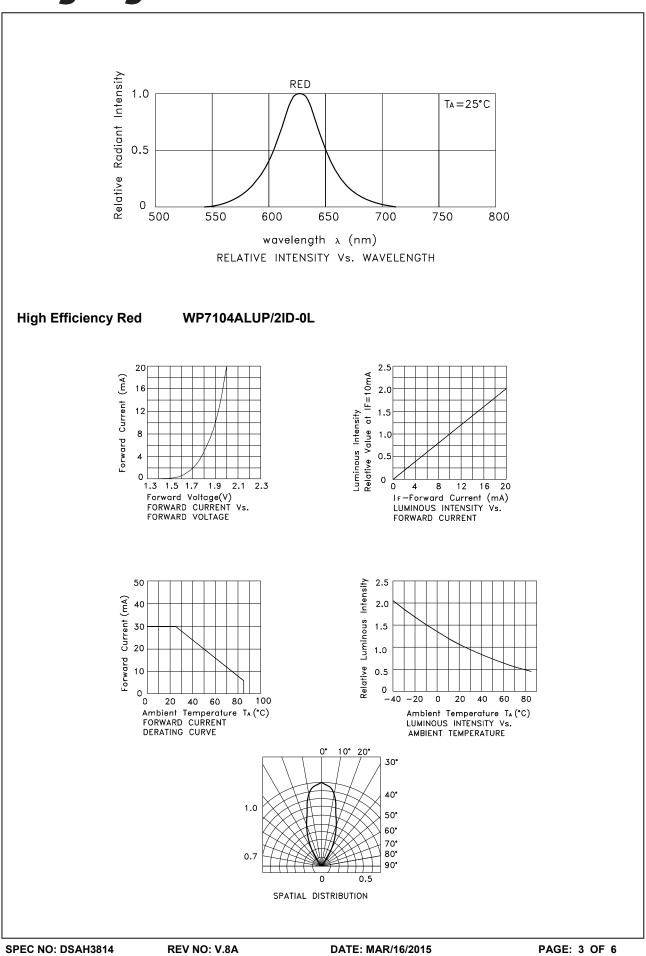
4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

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.



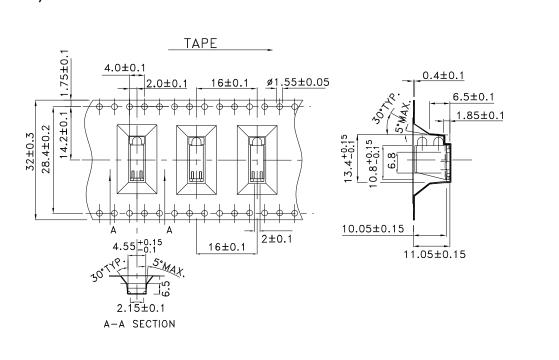




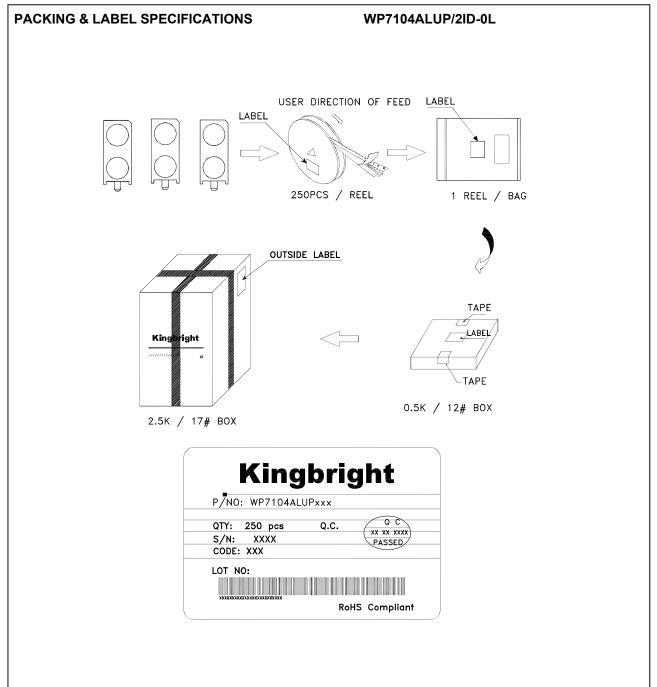
**Distributor of Kingbright: Excellent Integrated System Limited** Datasheet of WP7104ALUP/2ID-0L - LED IND 3MM BI-LVL RED DIFF SMD Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

## Kingbright

WP7104ALUP/2ID-0L Tape Dimensions (Units : mm)







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#### PRECAUTIONS

1.A moisture barrier bag (MBB) containing LEDs shall be kept in an environment with temperature below 40°C and humidity below 90% RH.

A MBB shall be kept sealed until the LEDs contained in that bag are to be used immediately. Storge in an environment with temperature  $5\sim30^{\circ}$ C and humidity below 60% RH.

- 2.After a MBB has been opened, all LEDs contained in that bag shall complete soldering process within according to the conditions listed on the Kingbright MBB.
- 3.If the 10% spot of a humidity indicator card (HIC) indicates wet, LEDs shall be baked according to the conditions listed on the Kingbright MBB.
- 4.During soldering, component covers and holders should leave clearance to avoid placing damaging stress on the LED during soldering.

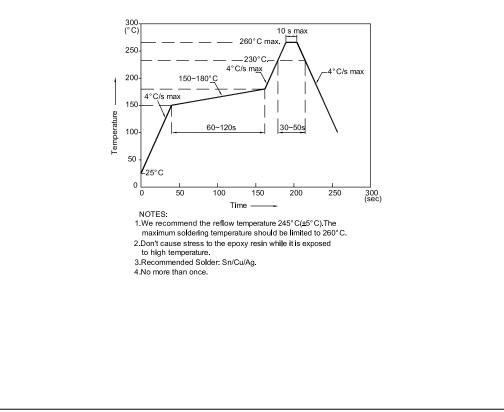


5. The tip of the soldering iron should never touch the lens epoxy.

6.After soldering, allow at least three minutes for the component to cool down to room temperature before further operations.

7.If the LED will undergo multiple soldering passes or face other processes where the part may be subjected to intense heat, please check with Kingbright for compatibility.

8.Recommended Reflow Soldering Profiles For SMD Housing LEDs



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