

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

Part Number: WP934EB/2ID High Efficiency Red

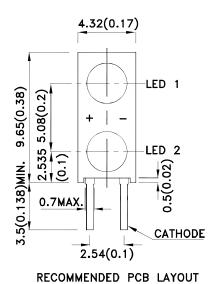
Features

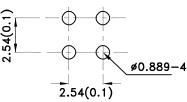
- Pre-trimmed leads for pc mounting.
- Black case enhances contrast ratio.
- High reliability life measured in years.
- Housing UL rating:94V-0.
- Housing material: type 66 nylon.
- RoHS compliant.

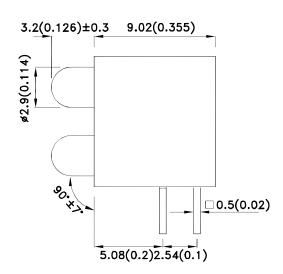
Description

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

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. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.





SPEC NO: DSAF1875 **REV NO: V.4 DATE: APR/11/2011** PAGE: 1 OF 5 APPROVED: WYNEC CHECKED: Allen Liu DRAWN: J.Yu ERP: 1102013063

Selection Guide

Part No.	Dice	Dice Lens Type Iv (mcd) [2] @ 10mA		,	Viewing Angle [1]
			Min.	Тур.	201/2
WP934EB/2ID	High Efficiency Red (GaAsP/GaP)	Red Diffused	15	30	40°

- Notes: 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak 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	I=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: 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

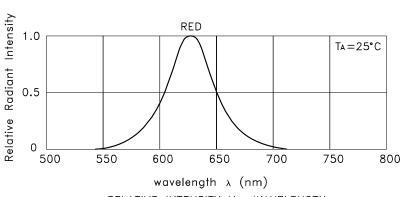
Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red		
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		

Notes:

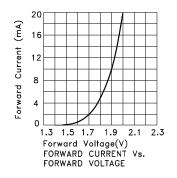
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
 2. 2mm below package base.
 3. 5mm below package base.

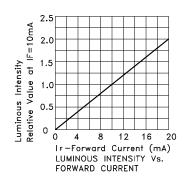
SPEC NO: DSAF1875 **REV NO: V.4** DATE: APR/11/2011 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: J.Yu ERP: 1102013063

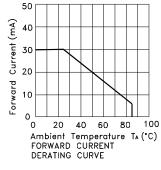


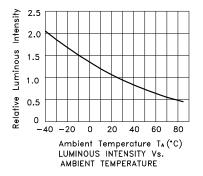
RELATIVE INTENSITY Vs. WAVELENGTH

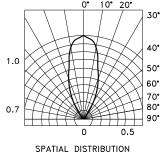
High Efficiency Red WP934EB/2ID





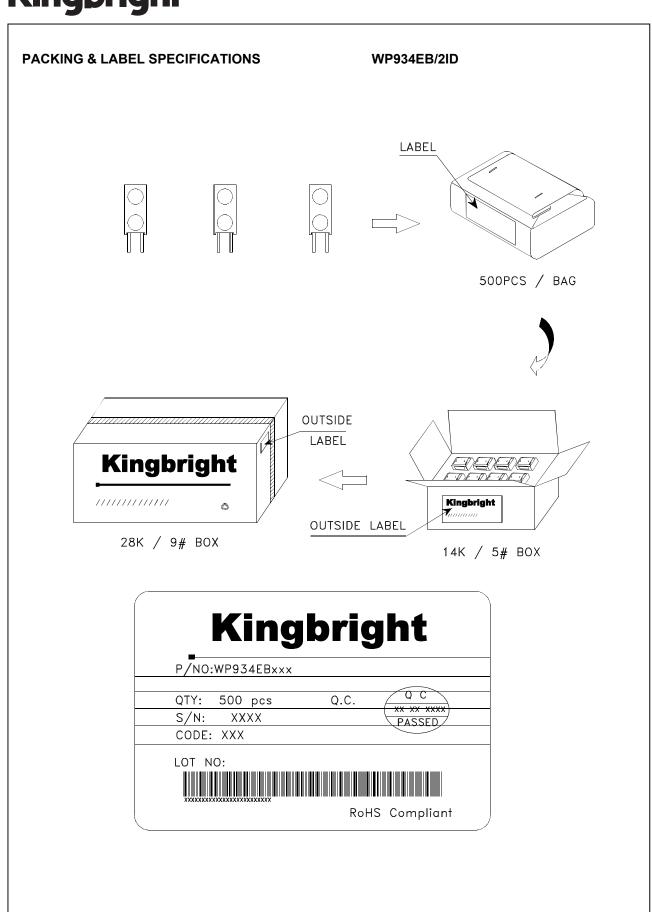






REV NO: V.4

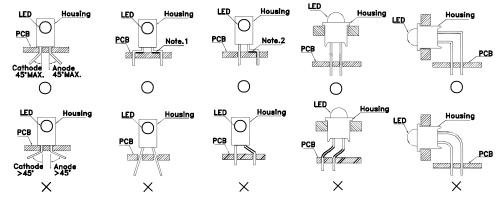
SPEC NO: DSAF1875 DATE: APR/11/2011 PAGE: 3 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: J.Yu ERP: 1102013063



SPEC NO: DSAF1875 APPROVED: WYNEC REV NO: V.4 CHECKED: Allen Liu DATE: APR/11/2011 DRAWN: J.Yu PAGE: 4 OF 5 ERP: 1102013063

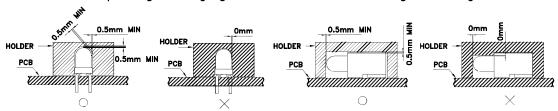
PRECAUTIONS

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.

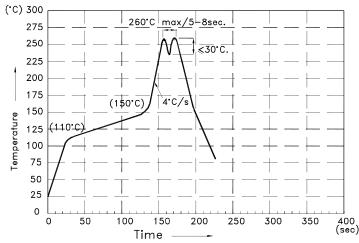


"() " Correct mounting method "imes" Incorrect mounting method

2. During soldering, component covers and holders should leave clearance to avoid placing damaging stress on the LED during soldering.



- 3. The tip of the soldering iron should never touch the lens epoxy.
- 4. Through—hole LEDs are incompatible with reflow soldering.
- 5. 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.
- 6. Recommended Wave Soldering Profile for Kingbright Thru—Hole Products



NOTES:

- 1.Recommend the wave temperature 245°C \sim 260°C.The maximum soldering temperature should be less than 260°C.
- $2.\mbox{Do}$ not apply stress on epoxy resins when temperature is over $85\mbox{°C}.$
- 3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
- 4.During wave soldering, the PCB top-surface temperature should be kept below 105°C.

5.No more than once.

 SPEC NO: DSAF1875
 REV NO: V.4
 DATE: APR/11/2011
 PAGE: 5 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: J.Yu
 ERP: 1102013063