

### 4mm SOLID STATE LAMP

L-43ID

HIGH EFFICIENCY RED

PAGE: 1 OF 3

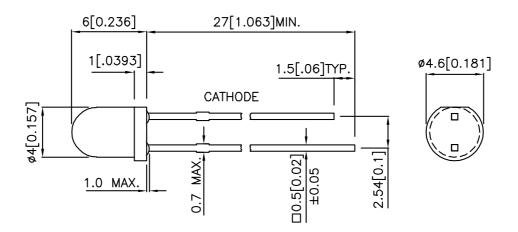
#### **Features**

- •LOW POWER CONSUMPTION.
- •VERSATILE MOUNTING ON P.C. BOARD OR PANEL.
- ●POPULAR 4mm DIAMETER.
- •RELIABLE AND RUGGED.
- ●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  $\pm 0.25 (0.01")$  unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge from the package.
- 4. Specifications are subject to change without notice.

SPEC NO: DSAA9022 **REV NO: V.4 DATE: MAR/21/2005 CHECKED: Allen Liu DRAWN: Y.CHENG** 

APPROVED: J. Lu

# **Kingbright**

### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 10mA		Viewing Angle
1 4.1.1.0.1		20110 1940	Min.	Тур.	201/2
L-43ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	5	15	80°

Note:

# 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	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	Forward Voltage	High Efficiency Red	2.0	2.5	V	IF=20mA
IR	Reverse Current	High Efficiency Red		10	uA	VR = 5V

# Absolute Maximum Ratings at Ta=25°C

Parameter	High Efficiency Red	Units	
Power dissipation	105	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	160	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		
.ead Solder Temperature [2] 260°C For 3 Seconds			
Lead Solder Temperature [3] 260°C For 5 Seconds			

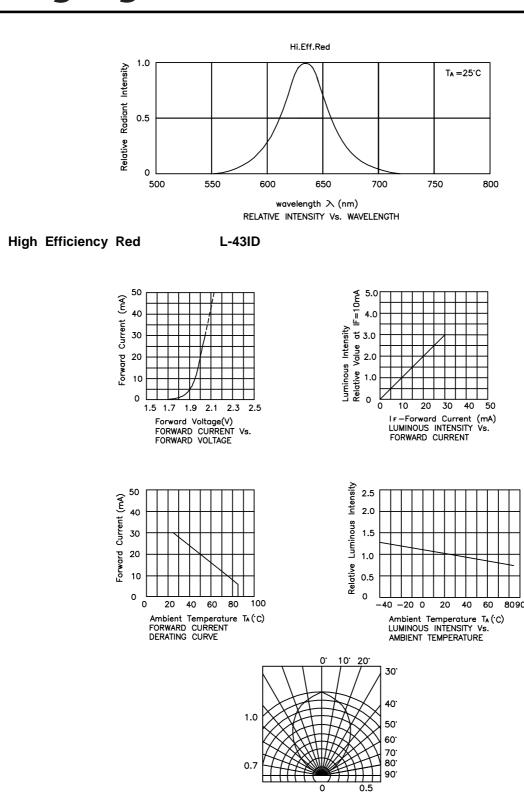
#### Notes:

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

SPEC NO: DSAA9022 REV NO: V.4 DATE: MAR/21/2005 PAGE: 2 OF 3
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<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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#### Remarks

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

SPEC NO: DSAA9022 REV NO: V.4 DATE: MAR/21/2005 PAGE: 3 OF 3
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