

## 5.6x4.9mm TRIANGULAR LED LAMPS

L-323HD BRIGHT RED L-323GD GREEN
L-323ID HIGH EFFICIENCY RED L-323YD YELLOW

L-323ED ORANGE

### **Features**

- •LOW POWER CONSUMPTION.
- •RELIABLE AND RUGGED.
- •SUITABLE FOR DIRECTION INDICATOR.
- •I.C. COMPATIBLE.

## **Description**

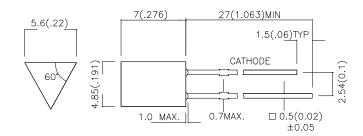
The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.

The High Efficiency Red and Orange 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.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

## **Package Dimensions**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25 (0.01\mbox{"})$  unless otherwise noted.
- $3. \, \text{Lead}$  spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

SPEC NO: KDA0156 REV NO: V.1 DATE: SEP/30/2001 PAGE: 1 OF 5
APPROVED: J. Lu CHECKED: DRAWN: X.M.Zhou



## **Selection Guide**

Part No.	Dice	Lens Type	<b>lv (mcd)</b> @ 10 mA		<b>Viewing</b> Angle
, are res	5.00	Lone type	Min.	Тур.	201/2
L-323HD	BRIGHT RED (GaP)	RED DIFFUSED	0.5	1	100°
L-323ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	3	8	100°
L-323ED	ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	3	8	100°
L-323GD	GREEN (GaP)	GREEN DIFFUSED	2	4	100°
L-323YD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	2	4	100°

#### Note

# Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Symbol	Parameter	Device T		Max. Units		Test Conditions	
λpeak	Peak Wavelength	Bright Red High Efficiency Red Orange Green Yellow	700 627 627 565 590		nm	IF=20mA	
λD	Dominate Wavelength	Bright Red High Efficiency Red Orange Green Yellow	660 625 625 568 588		nm	IF=20mA	
Δλ1/2	Spectral Line Halfwidth	Bright Red High Efficiency Red Orange Green Yellow	45 45 45 30 35		nm	IF=20mA	
С	Capacitance	Bright Red High Efficiency Red Orange Green Yellow	40 15 15 15 20		pF	VF=0V;f=1MHz	
V <sub>F</sub>	Forward Voltage	Bright Red High Efficiency Red Orange Green Yellow	2.25 2.0 2.0 2.2 2.1	2.5 2.5 2.5 2.5 2.5 2.5	V	IF=20mA	
l <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V	

SPEC NO: KDA0156 REV NO: V.1 DATE: SEP/30/2001 PAGE: 2 OF 5
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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.

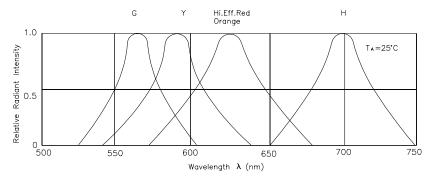


## Absolute Maximum Ratings at T<sub>A</sub>=25°C

Parameter	Bright Red	<b>High</b> Efficiency Red	Orange	Green	Yellow	Units	
Power dissipation	120	105	105	105	105	mW	
DC Forward Current	25	30	30	25	30	mA	
Peak Forward Current [1]	120	160	160	140	140	mA	
Reverse Voltage	5	5	5	5	5	V	
Operating/Storage Temperature	-40°C To +85°C						
Lead Solder Temperature [2]	260°C For 5 Seconds						

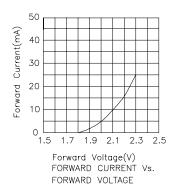
#### Notes:

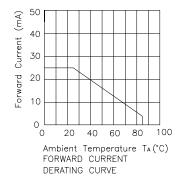
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 4mm below package base.

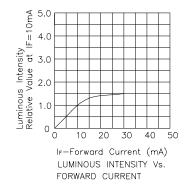


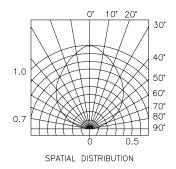
RELATIVE INTENSITY Vs. WAVELENGTH

# **Bright Red L-323HD**







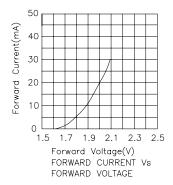


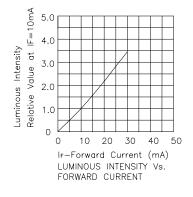
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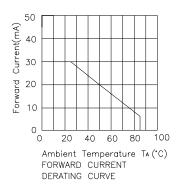
DATE: SEP/30/2001 PAGE: 3 OF 5
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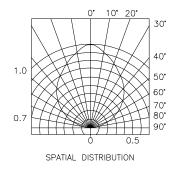
# Kingbright

# High Efficiency Red L-323ID

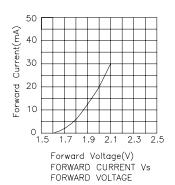


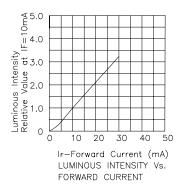


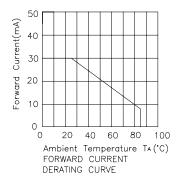


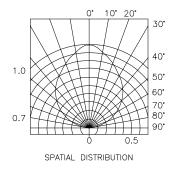


# Orange L-323ED





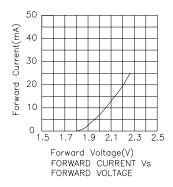


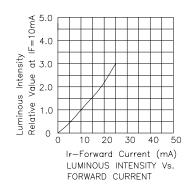


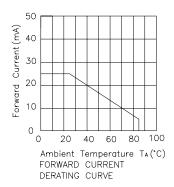
SPEC NO: KDA0156 APPROVED: J. Lu REV NO: V.1 CHECKED: DATE: SEP/30/2001 DRAWN: X.M.Zhou PAGE: 4 OF 5

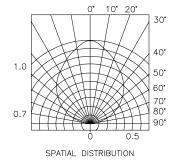
# **Kingbright**

## Green L-323GD

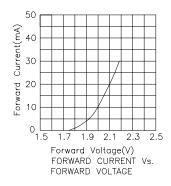


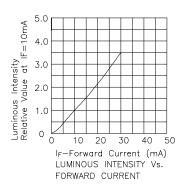


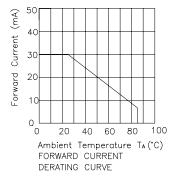


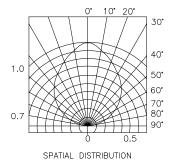


## Yellow L-323YD









SPEC NO: KDA0156 APPROVED: J. Lu REV NO: V.1 CHECKED: DATE: SEP/30/2001 DRAWN: X.M.Zhou PAGE: 5 OF 5