

#### 3x4.5mm TRIANGULAR LED LAMPS

L-362HD BRIGHT RED L-362GD GREEN
L-362ID HIGH EFFICIENCY RED L-362YD YELLOW

#### **Features**

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

#### **Description**

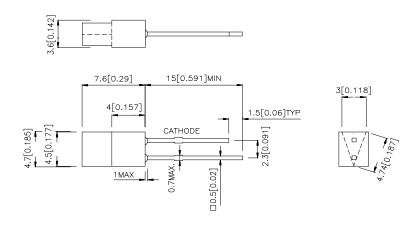
The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.

The High Efficiency Red 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  $\pm 0.25 (0.01")$  unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

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## **Selection Guide**

Part No.	Dice	Lens Type	<b>lv (mcd)</b> @ 10 mA		<b>Viewing</b> Angle
		20.10 1990	Min.	Тур.	201/2
L-362HD	BRIGHT RED (GaP)	RED DIFFUSED	0.5	0.8	100°
L-362ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	1	3	100°
L-362GD	GREEN (GaP)	GREEN DIFFUSED	1	2	100°
L-362YD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	1	2	100°

#### Note

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

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

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

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

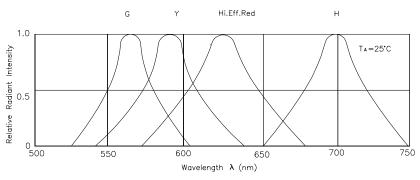
#### Notes

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

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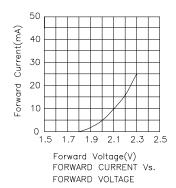
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

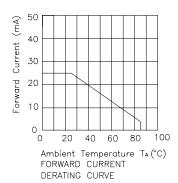


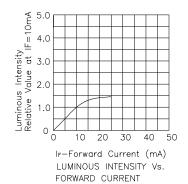


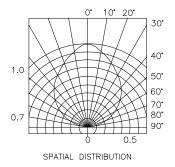
#### RELATIVE INTENSITY Vs. WAVELENGTH

## **Bright Red L-362HD**







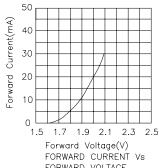


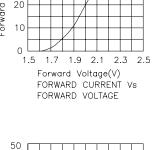
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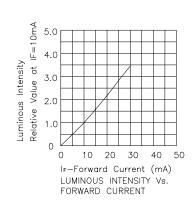
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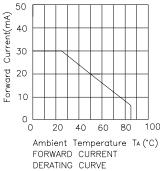
## Kingbright

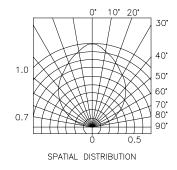
## **High Efficiency Red L-362ID**



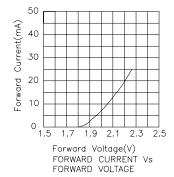


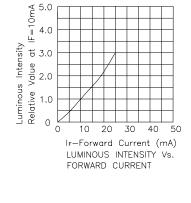


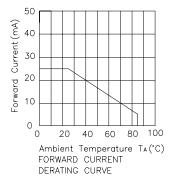


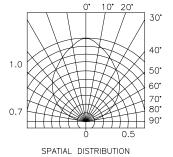


### Green L-362GD









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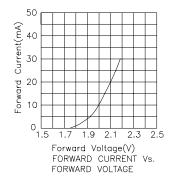
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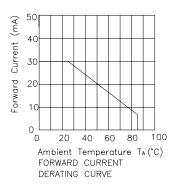
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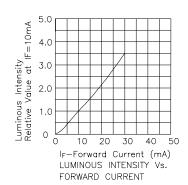
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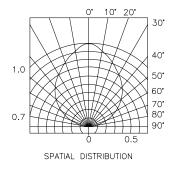
# Kingbright

## Yellow L-362YD









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