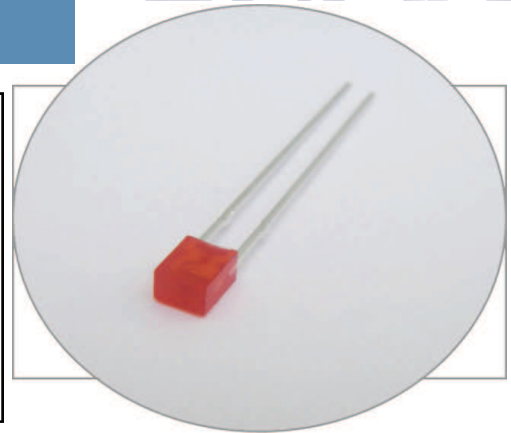


Rectangular Package Discrete LED RED, 2 x 3 mm, 5V

BIVAR



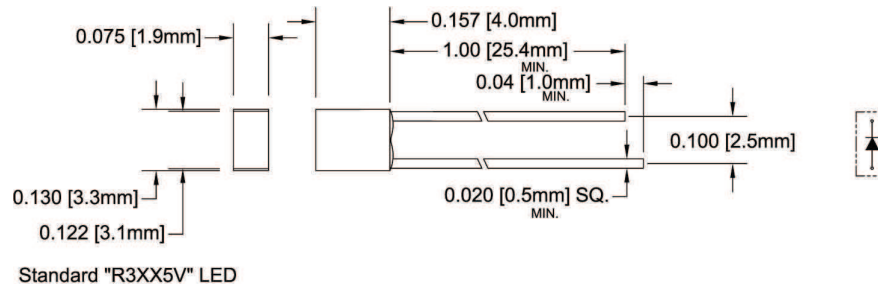
R3HX5V

- ◆ Rectangular Package
- ◆ RoHS Compliant
- ◆ Water Clear (C), Diffused (D), and Tinted (T) Lenses
- ◆ Available in Standard Lead Frame style
- ◆ Ideal for Status Indication and Bar Graph Displays
- ◆ 5V Operating Voltage
- ◆ Recommended for Bivar H-480C holder assemblies

Bivar Rectangular 2 x 3mm Package 5V LED is ideal for those applications equipped with regular 5V power supplies such as server and computer peripherals. The rectangular package makes it ideal for creating bar graph displays when arranged in linear LED arrays. Bivar offers water clear LED lens for maximum light output, diffused LED lens for uniform light output, and tinted lens to identify the color of the LED. The Standard Lead frame LED is ideal for vertical spacer assemblies and Right Angle Holder assemblies that require lead bends.

Part Number	Material	Emitted Color	Peak. Wavelength λ_p (nm) TYP.	Lens Appearance	Viewing Angle
R3HC5V	GaAsP/GaP	RED	625nm	Water Clear	80°
R3HD5V				Red Diffused	100°
R3HT5V				Red Tinted	80°

Outline Dimensions

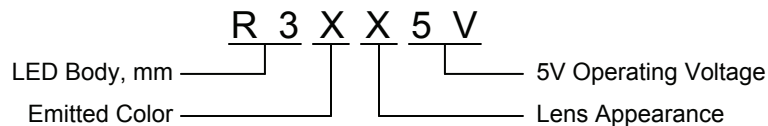


Recommended Mounting
Hole Size = $\varnothing.032^{+.003}_{-.002}$

Outline Drawings Notes:

1. All dimensions are in inches [millimeters].
2. Standard tolerance: ± 0.010 " unless otherwise noted.
3. Tolerance of overall epoxy outline: ± 0.020 " unless otherwise noted.
4. Epoxy meniscus may extend to 0.060" max.

Part Number Designation



Bivar reserves the right to make changes at any time without notice.

Absolute Maximum Ratings

T_A = 25°C unless otherwise noted

Power Dissipation	/ mW
Forward Current (DC)	8 mA
Peak Forward Current ¹	12 mA
Reverse Voltage	5 V
Operating Temperature Range	-25 ~ +85°C
Storage Temperature Range	-30 ~ +100°C
Lead Soldering Temperature (3 mm from the base of the epoxy bulb) ²	260°C

Notes: 1. 10% Duty Cycle, Pulse Width ≤ 0.1 msec. 2. Solder time less than 5 seconds at temperature extreme.

Electrical / Optical Characteristics

T_A = 25°C & V_F = 5V unless otherwise noted

Part Number	Forward Voltage (V) ¹			Recommend Forward Current (mA)			Reverse Current (μA)	Dominant Wavelength (nm) ²			Luminous Intensity I _v (mcd)			Viewing Angle 2 Θ ½ (deg)
	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
R3HC5V								/	/	/	/	8	/	80
R3HD5V	/	/	5.0	/	/	/	100	/	/	/	/	6	/	100
R3HT5V								/	/	/	/	8	/	80

Notes: 1. Tolerance of forward voltage : ±0.05V. 2. Tolerance of dominant wavelength : ±1.0nm.

Rectangular Package Discrete LED RED, 2 x 3 mm, 5V



Typical Electrical / Optical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

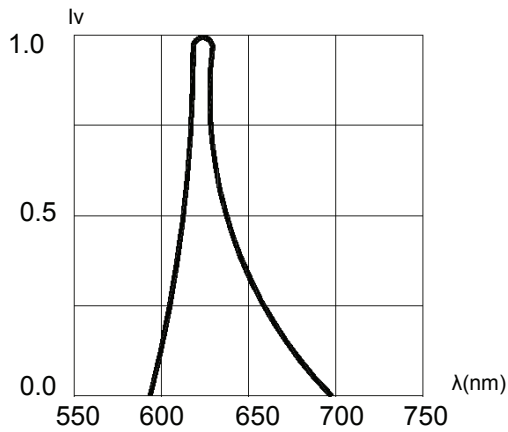


Fig. 1 Relative Luminous Intensity vs. Wavelength

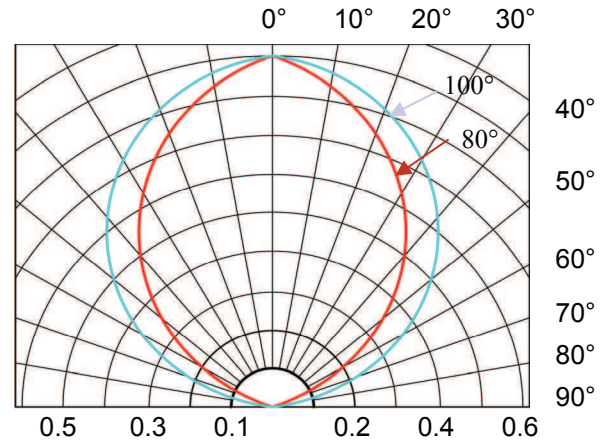


Fig. 2 Directivity Radiation Diagram

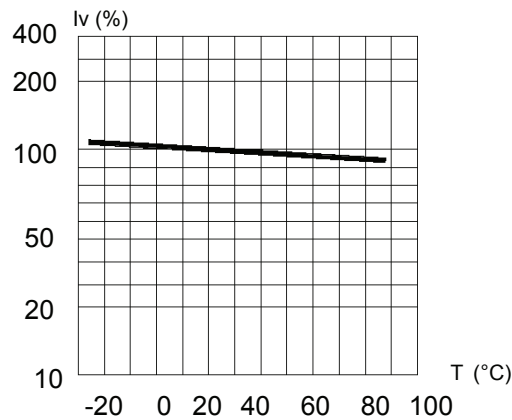


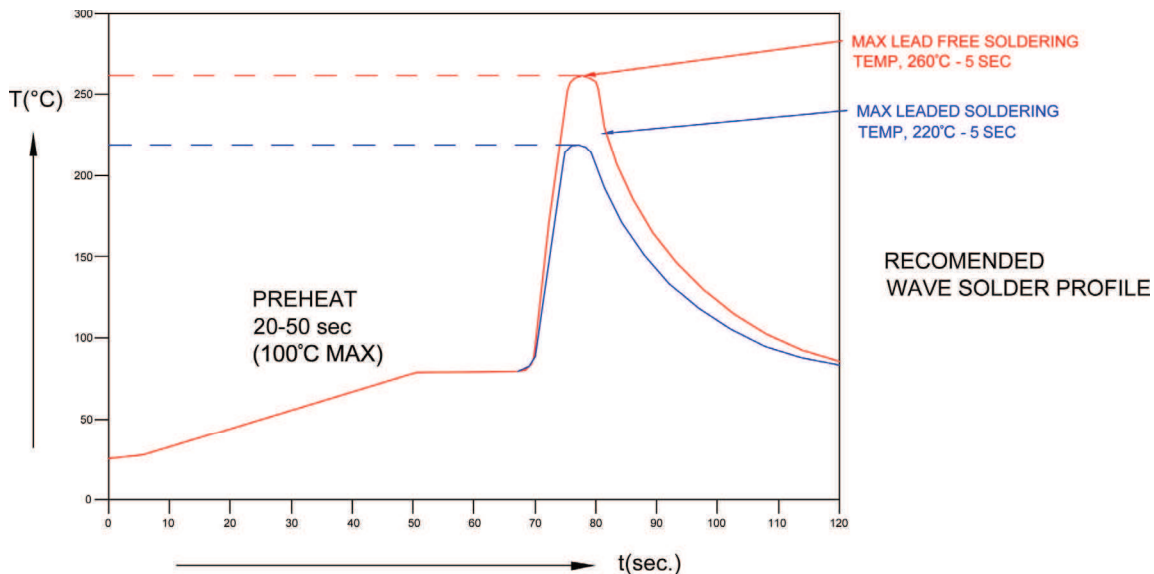
Fig. 3 Relative Intensity (%) vs. Temperature

Bivar reserves the right to make changes at any time without notice.

Rectangular Package Discrete LED RED, 2 x 3 mm, 5V

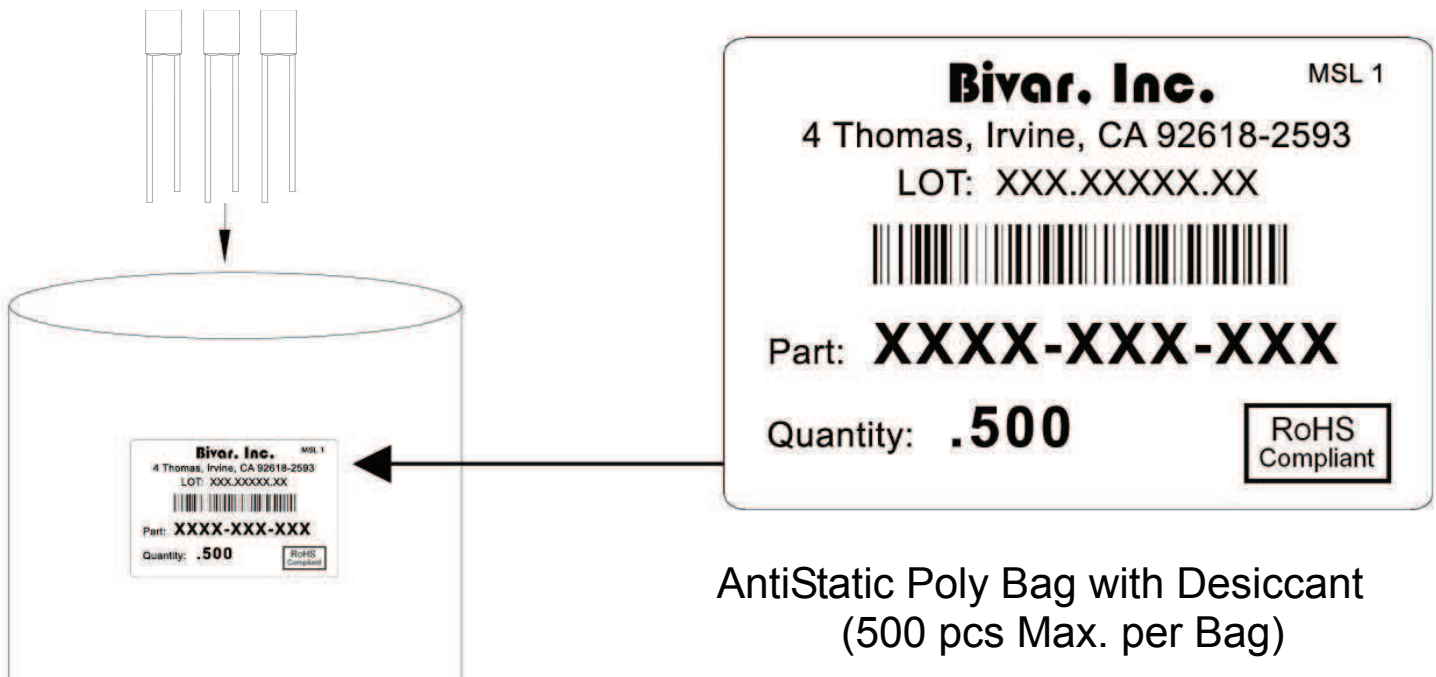


Recommended Soldering Conditions



Recommended Lead Free Wave Soldering Profile	
Preheat Temperature: 100°C Max.	Peak Temperature: 260°C Max.
Preheat Time: 20 ~ 50 Seconds	Solder Time Above 217°C: 5 Seconds Max.
Note: Turn off top heater at preheat to prevent the lamp body directly exposed to the heat source.	

Packaging and Labeling Plan



AntiStatic Poly Bag with Desiccant
(500 pcs Max. per Bag)

Bivar reserves the right to make changes at any time without notice.