BIVAR



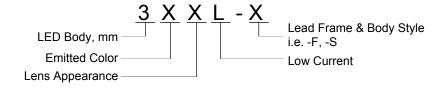
- ♦ Industry Standard 3mm (T1) Package
- **♦** RoHS Compliant
- ◆ Diffused Lens
- Available in Flange (F) and Shouldered (S) Lead Frame styles
- ♦ 2 mA Low Operating Current
- Ideal for Status Indication and Display



Bivar 3mm T1 Package 2 mA Low Current LED is special binned at 2 mA and is ideal for those applications where lower power budget is required such as solar panel or battery-powered portable devices. Bivar offers diffused LED lens for uniform light output. The Flanged LED is ideal for Panel Mount Clip & Ring assemblies. The Shouldered Lead frame LED is ideal for vertical spacer assemblies without lead bends and also has a built in strain relief feature which is ideal for right angle holder assemblies that require lead bends.

Part Number	Material	Emitted Color	Peak. Wavelength λρ(nm) TYP.	Lens Appearance	Viewing Angle	
3YDL-F	GaAsP/GaP	YELLOW	590nm	Yellow Diffused	35°	
3YDL-S			3901111	Yellow Diffused	40°	

Part Number Designation



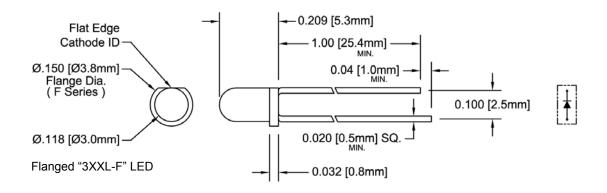


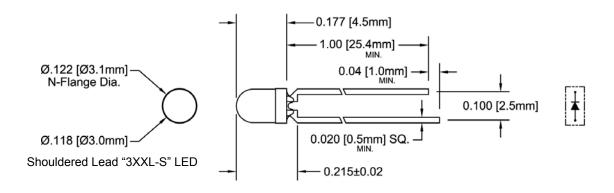






Outline Dimensions





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

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.



Absolute Maximum Ratings

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

Power Dissipation	10 mW
Forward Current (DC)	7 mA
Peak Forward Current ¹	/ 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 & $I_F = 2$ mA unless otherwise noted

Part Number		orwai Itage		F	comm forwai rrent (rd	Reverse Current (µA)	Dominant Wavelength (nm) ²		Luminous Intensity Iv (mcd)			Viewing Angle 2 Θ ½ (deg)	
	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
3YDL-F	,	0.0	2.6	,	2	,	100	1	1	/	1	2	/	35
3YDL-S	/ 2.0 2.6	2.6	/	2	/	100	/	1	/	/	2	/	40	

Notes: 1. Tolerance of forward voltage: ±0.05V.

2. Tolerance of dominant wavelength: ±1.0nm.



Typical Electrical / Optical Characteristics

 $T_A = 25$ °C unless otherwise noted

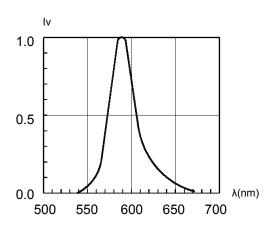


Fig. 1 Relative Luminous Intensity vs. Wavelength

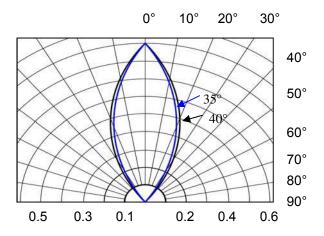


Fig. 2 Directivity Radiation Diagram

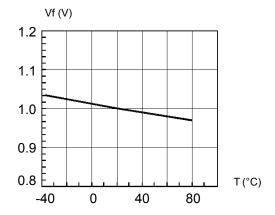


Fig. 3 Forward Voltage vs. Temperature

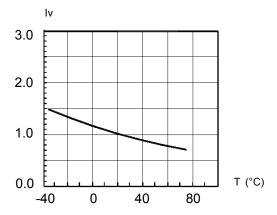
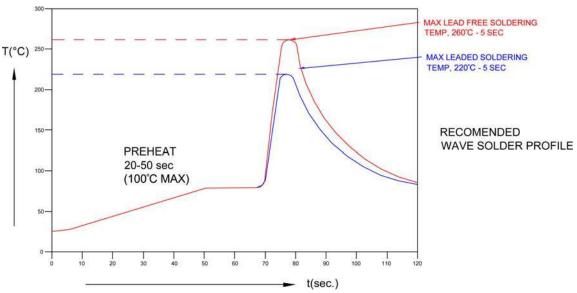


Fig. 4 Relative Luminous Intensity vs. Temperature

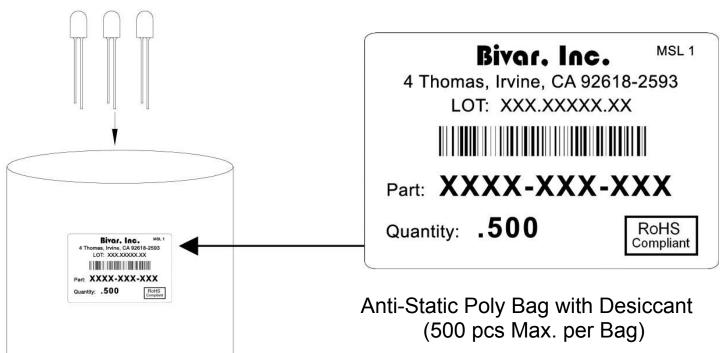


Recommended Soldering Conditions



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



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