



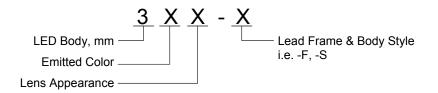
- Water Clear (C), Diffused (D), and Tinted (T) Lenses
- Available in Flange (F) and Shouldered (S) Lead Frame Styles
- Ideal for Status Indication and Display



Bivar 3mm T1 Package LED may be used in almost any application. 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 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 λp(nm) TYP.	Lens Appearance	Viewing Angle	
3PGC-F	3PGC-F 3PGD-F 3PGT-F 3PGC-S 3PGD-S 3PGT-S	GREEN		Water Clear	20°	
3PGD-F			555000	Green Diffused	35°	
3PGT-F				Green Tinted	20°	
3PGC-S			555nm	Water Clear	30°	
3PGD-S				Green Diffused	40°	
3PGT-S				Green Tinted	30°	

#### **Part Number Designation**



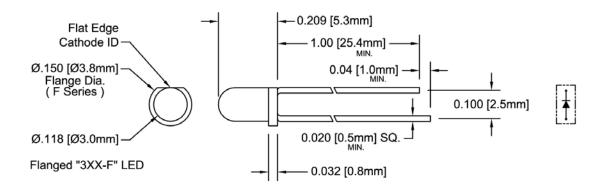


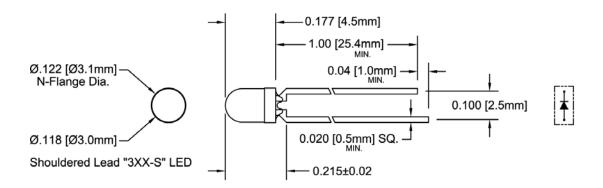






### **Outline Dimensions**





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<sub>A</sub> = 25°C unless otherwise noted

Power Dissipation	80 mW
Forward Current ( DC )	30 mA
Peak Forward Current <sup>1</sup>	150 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 ) <sup>2</sup>	260°C

Notes: 1. 10% Duty Cycle, Pulse Width ≤ 0.1 msec.

### **Electrical / Optical Characteristics**

 $T_A = 25^{\circ}C \& I_F = 20 \text{ mA}$  unless otherwise noted

Part Number	Forward Voltage (V) <sup>1</sup>		Recommend Forward Current (mA)		Reverse Current (µA)	Dominant Wavelength (nm) <sup>2</sup>			Luminous Intensity Iv (mcd)			Viewing Angle 2 Θ ½ (deg)		
	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
3PGC-F								/	1	1	1	10	/	20
3PGD-F	/	2.2	2.8	/	20	1	100	/	1	1	1	5	/	35
3PGT-F								1	1	1	1	10	/	20
3PGC-S								/	1	1	/	10	/	30
3PGD-S	/	2.2	2.8	/	20	/	100	/	1	1	1	5	/	40
3PGT-S								/	1	1	/	10	/	30

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

2. Tolerance of dominant wavelength: ±1.0nm.

<sup>2.</sup> Solder time less than 5 seconds at temperature extreme.



### **Typical Electrical / Optical Characteristics**

 $T_A = 25$ °C unless otherwise noted

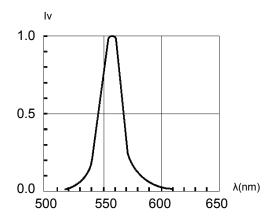


Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA

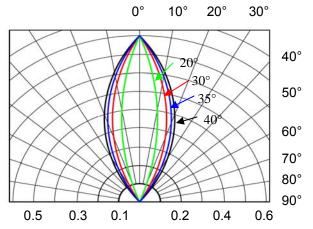


Fig. 2 Directivity Radiation Diagram

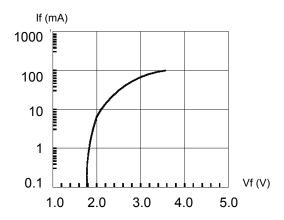


Fig. 3 Forward Current vs. Forward Voltage

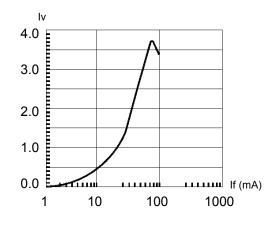


Fig. 4 Relative Luminous Intensity vs. Forward Current Normalize @ 20 mA

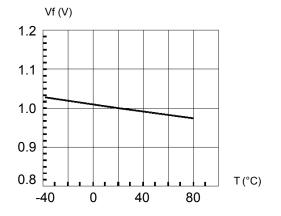


Fig. 5 Forward Voltage vs. Temperature

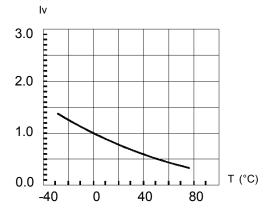
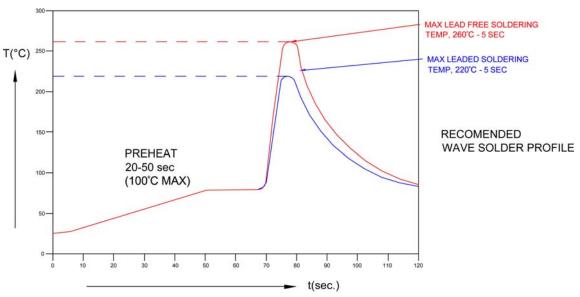


Fig. 6 Relative Luminous Intensity vs. Temperature

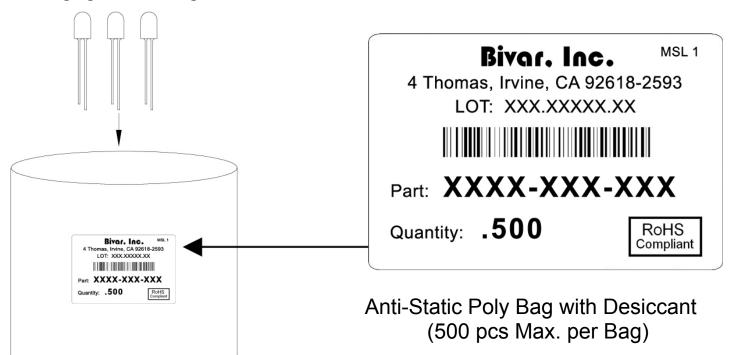


#### **Recommended Soldering Conditions**



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

#### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Standard LEDs - Through Hole category:

Click to view products by Bivar manufacturer:

Other Similar products are found below:

LTL-10254W LTL-1214A LTL-3251A LTL-4262N LTL-433P LTL-5234 LTL87HTBK LTW-87HD4B HLMP-EL30-PS0DD

1L0532V23G0TD001 NSPW500CS NTE30036 NTE30044 NTE30059 NTE3020 LD CQDP-1U3U-W5-1-K LO566UHR3-70G-A3

LP379PPG1C0G0300001 SLR-342MC3F SLX-LX3044GD SLX-LX3044ID SLX-LX3044YD 1.90690.3330000 SSS-LX4673ID-410B

1L0532Y24I0TD001 264-7SYGD/S530-E2 HLMP1385 LTL-10224W LTL-1224A LTL-1234A LTL-2251AT LTL-307YE-012 LTL-403HR LTL-4222 LU7-E-B 4380H1 TLHY44K1L2 HLMP-3962-F0002 HLMP-GG15-R0000 323-2SURD/S530-A3 L53SRC/E-Z L-7679C1ZGC 4302T1-5V 4306D23 4363D1/5 WP1503SRC/J4 WP153GDT WP153YDT WP1543SGC WP1543SRC/D