BIVAR



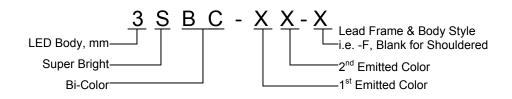
3SBC-Y/G-X

- ♦ Industry Standard 3mm (T1) Package
- **♦** RoHS Compliant
- ◆ 2-Lead Super Bright Bi-Color LED
- ♦ White Diffused Lens
- Available in Flange (F) and Shouldered (Blank) Lead Frame styles
- Ideal for Status Indication and Display

Bivar 3mm T1 Package Bi-Color LED is ideal for those applications where dual signals need to be displayed at the same location such as standby-on indication for server or computer peripherals. Bivar offers white diffused LED lens for uniform light output and the 2-lead package simplifies the circuitry design where a reverse voltage is available. The Flanged LED is ideal for Panel Mount Clip & Ring assemblies and the Shouldered Lead frame LED has a built in strain relief feature which is ideal for Right Angle Holder assemblies that require lead bends. A long lead version is also available with a "-LL" suffix added to the part numbers.

Part Number	Material	Emitted Color	Peak. Wavelength λp(nm) TYP.	Lens Appearance	Viewing Angle		
3SBC-Y/G-F	AlGalnP	YELLOW	590nm				
35BC-1/G-F	GaP/GaP				45°		
25DC V/C	AlGalnP YELLOW		590nm	White Diffused	45		
3SBC-Y/G	GaP/GaP	GREEN	568nm				

Part Number Designation



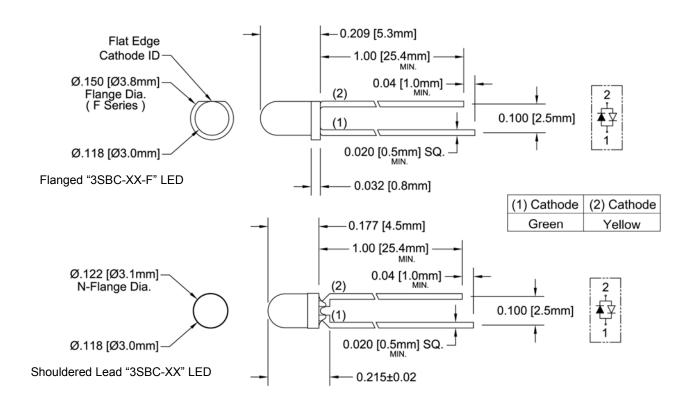








Outline Dimensions



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

NOTE: Add suffix -LL for long lead. Changes 1.00 Min. to 1.57 Min.

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°C unless otherwise noted

Power Dissipation	Yellow - 85 mW Green - 80 mW		
Forward Current (DC)	30 mA		
Peak Forward Current ¹	150 mA		
Operating Temperature Range	-40 ~ +80°C		
Storage Temperature Range	-40 ~ +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

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

Part Number	Emitted Color	voitage (v)		Recommend Forward Current (mA)		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
3SBC-	Yellow	/	2.0	2.4	. / 2	20 /	,	1	/	1	/	/	20	1	45
Y/G-F	Green	/	2.1	2.8			,		/	1	/	/	15	1	
3SBC-	Yellow	/	2.0	2.4	/ 20	20	,	,	/	1	/	/	20	/	45
Y/G	Green	1	2.1	2.8		.0 /	,	/	/	/	/	15	/	45	

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

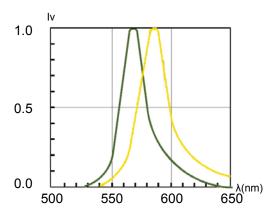


Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA

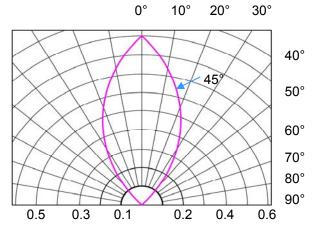


Fig. 2 Directivity Radiation Diagram

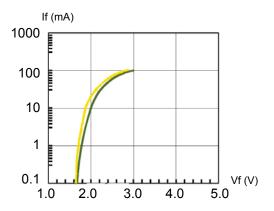


Fig. 3 Forward Current vs. Forward Voltage

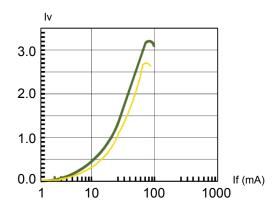


Fig. 4 Relative Luminous Intensity vs. Forward Current Normalize @ 20 mA

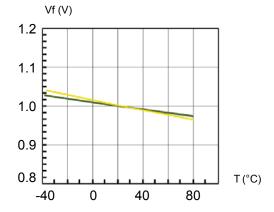


Fig. 5 Forward Voltage vs. Temperature

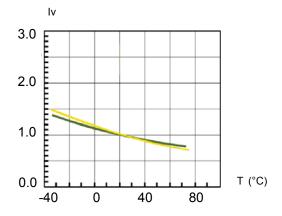
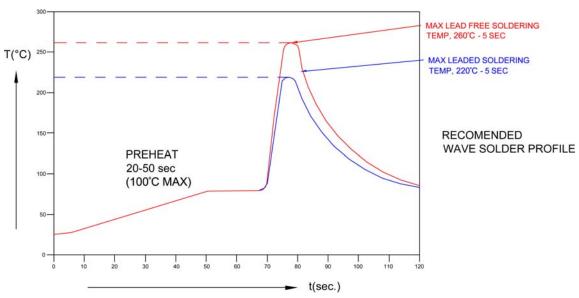


Fig. 6 Relative Luminous Intensity vs. Temperature

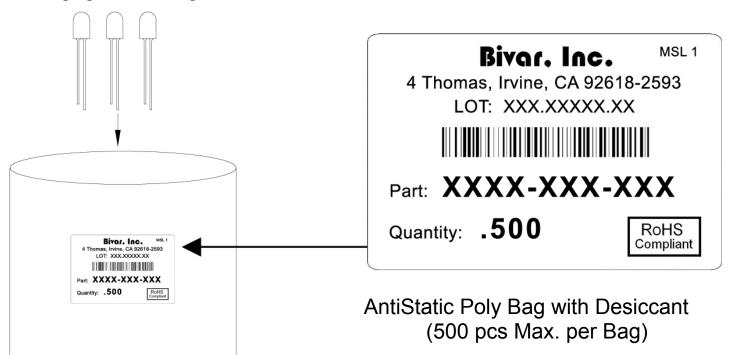


Recommended Soldering Conditions



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.