### BIVAR

#### 5BC-Y/G-X

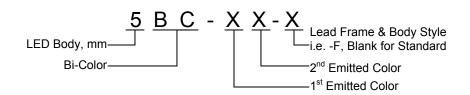
- ♦ Industry Standard 5mm (T1 ¾) Package
- **♦** RoHS Compliant
- ♦ White Diffused Lens
- ◆ Available in Flange (F) and Standard (Blank) Lead Frame styles
- ♦ 2-Lead Bi-Color LED
- Ideal for Status Indication and Display



Bivar 5mm T1 ¾ 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. Bivar offers white diffused LED lens for uniform light output. The Flange LED is ideal for Panel Mount Clip & Ring assemblies and the Standard Lead frame LED is ideal for vertical spacer assemblies without lead bends.

Part Number	Material	Emitted Color	Peak. Wavelength λp(nm) TYP.	Lens Appearance	Viewing Angle		
5BC-Y/G-F GaP/GaP		YELLOW	590nm				
		GREEN	568nm	White Diffused	45°		
EDC VIC	GaAsP/GaP	YELLOW	590nm	vviille Dillused	45°		
5BC-Y/G	GaP/GaP	GREEN	568nm				

### **Part Number Designation**



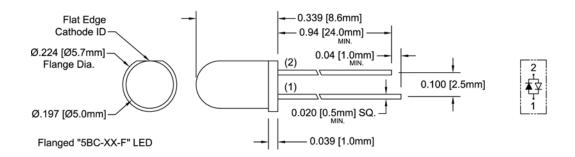




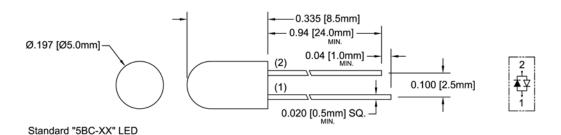




#### **Outline Dimensions**



(1) Cathode	(2) Cathode
Green	Yellow



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	Yellow - 85 mW Green - 80 mW		
Forward Current ( DC )	30 mA		
Peak Forward Current <sup>1</sup>	150 mA		
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.

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) <sup>2</sup>			Luminous Intensity Iv (mcd)			Viewing Angle 2 O ½ (deg)		
		MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
5BC-Y/G-F	Yellow	/	2.0	2.8	/	20	/	100	/	/	/	/	6	/	45
3BC-1/G-F	Green	/	2.1	2.8					/	/	/	/	8	/	
EDC VIC	Yellow	/	2.0	2.8	1	20	1	100	/	/	/	/	5	/	- 45
5BC-Y/G	Green	1	2.1	2.8					/	1	/	1	8	/	

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

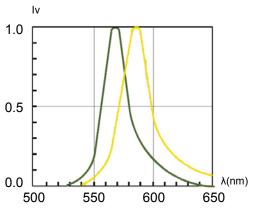


Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA

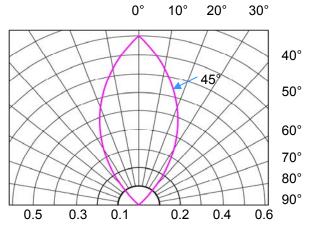


Fig. 2 Directivity Radiation Diagram

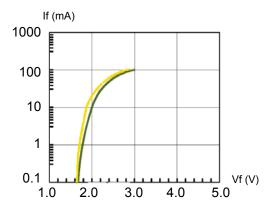


Fig. 3 Forward Current vs. Forward Voltage

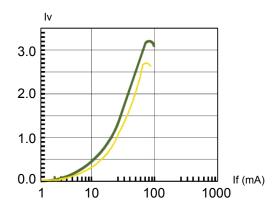


Fig. 4 Relative Luminous Intensity vs. Forward Current Normalize @ 20 mA

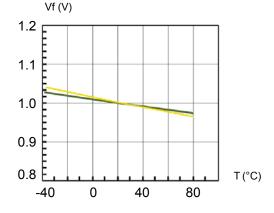


Fig. 5 Forward Voltage vs. Temperature

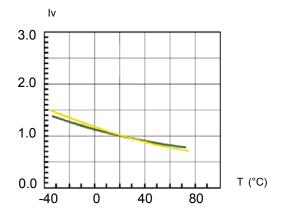
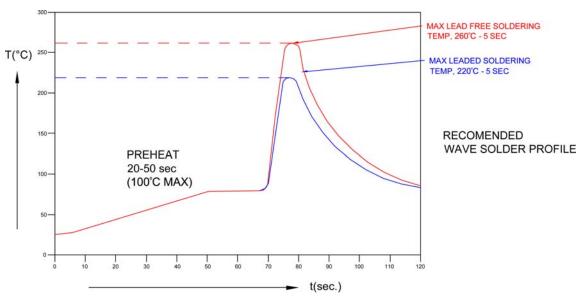


Fig. 6 Relative Luminous Intensity vs. Temperature

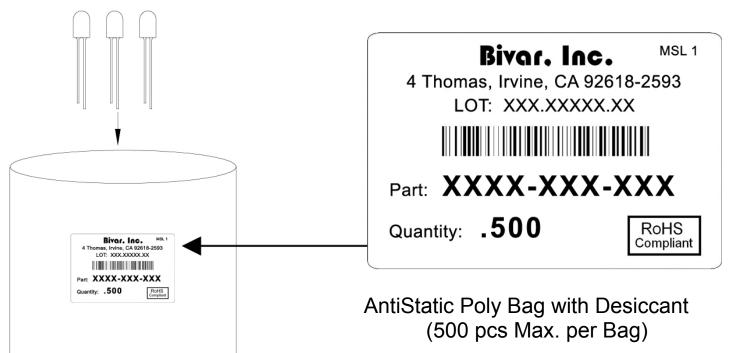


#### **Recommended Soldering Conditions**



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