5mm (T1 ¾) Package Discrete LED YELLOW



5YX-X

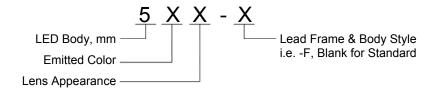
- ♦ Industry Standard 5mm (T1 ¾) Package
- **♦** RoHS Compliant
- Water Clear (C), Diffused (D), and Tinted (T) Lenses
- Available in Flange (F) and Standard (Blank) Lead Frame styles
- ♦ Ideal for Status Indication and Display



Bivar 5mm T1 ¾ 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 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	
5YC-F	GaAsP/GaP	YELLOW		Water Clear	35°	
5YD-F			F00pm	Yellow Diffused	40°	
5YT-F				Yellow Tinted	35°	
5YC			590nm	Water Clear	35°	
5YD				Yellow Diffused	45°	
5YT				Yellow Tinted	35°	

Part Number Designation





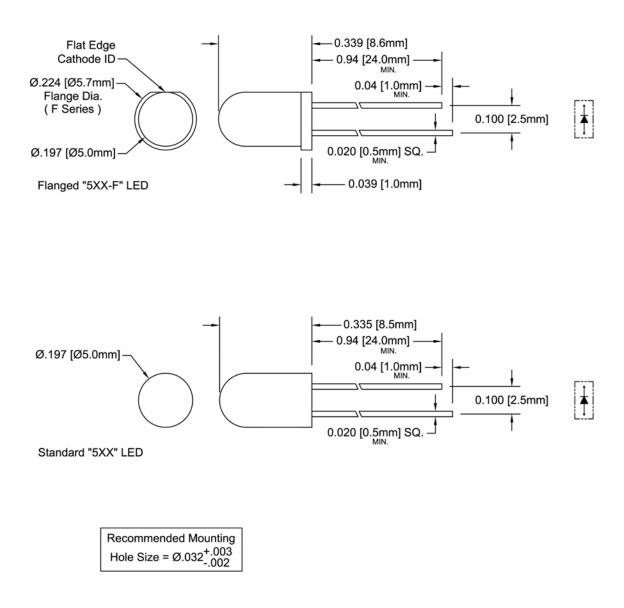




5mm (T1 ¾) Package Discrete LED YELLÓW



Outline Dimensions



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.

5mm (T1 ¾) Package Discrete LED YELLOW



Absolute Maximum Ratings

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

Power Dissipation	85 mW	
Forward Current (DC)	30 mA	
Peak Forward Current ¹	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) 2	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) ¹		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
5YC-F								1	1	/	1	40	/	35
5YD-F	/	2.0	2.8	1	20	1	100	1	1	/	1	25	/	40
5YT-F								/	1	/	/	40	/	35
5YC								1	1	/	1	40	/	35
5YD	/	2.0	2.8	/	20	/	100	1	1	/	1	25	/	45
5YT								1	1	/	1	40	/	35

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

^{2.} Solder time less than 5 seconds at temperature extreme.

5mm (T1 ¾) Package Discrete LED YELLOW



Typical Electrical / Optical Characteristics

 $T_A = 25$ °C unless otherwise noted

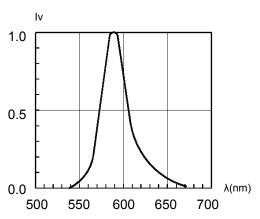


Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA

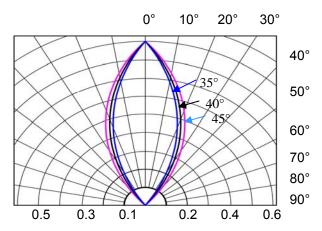


Fig. 2 Directivity Radiation Diagram

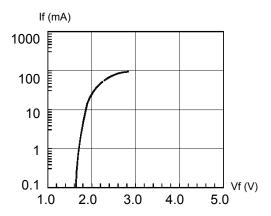


Fig. 3 Forward Current vs. Forward Voltage

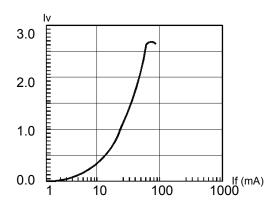


Fig. 4 Relative Luminous Intensity vs. Forward Current Normalize @ 20 mA

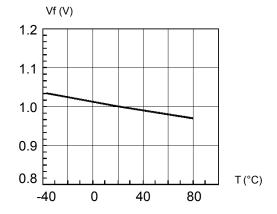


Fig. 5 Forward Voltage vs. Temperature

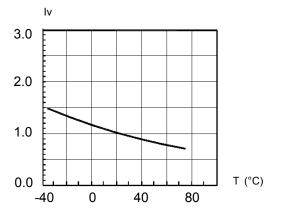
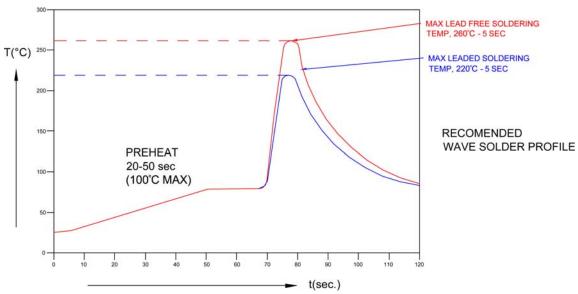


Fig. 6 Relative Luminous Intensity vs. Temperature

5mm (T1 ¾) Package Discrete LED YELLOW

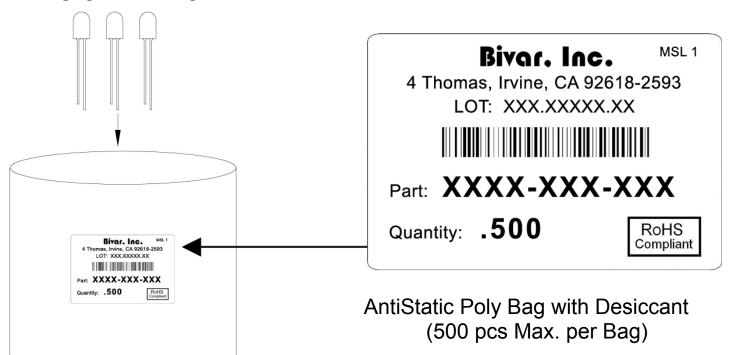


Recommended Soldering Conditions



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