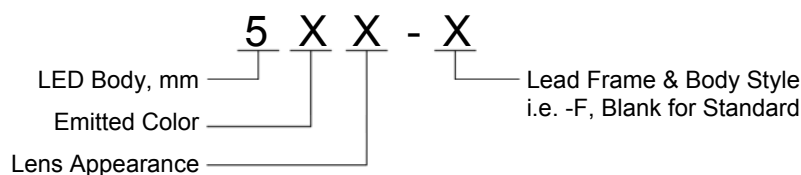


- ◆ **Industry Standard 5mm (T1 ¾) Package**
- ◆ **RoHS Compliant**
- ◆ **Water Clear (C), Diffused (D), and Tinted (T) Lenses**
- ◆ **Available in Flange (F) and Standard (Blank) Lead Frame styles**
- ◆ **Ideal for Status Indication and Display**



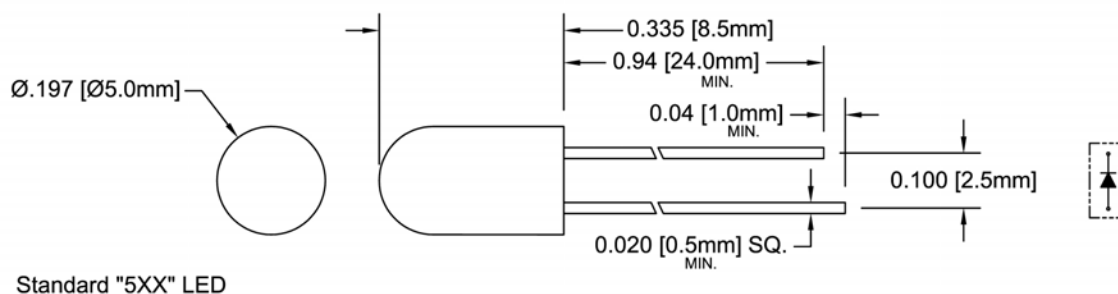
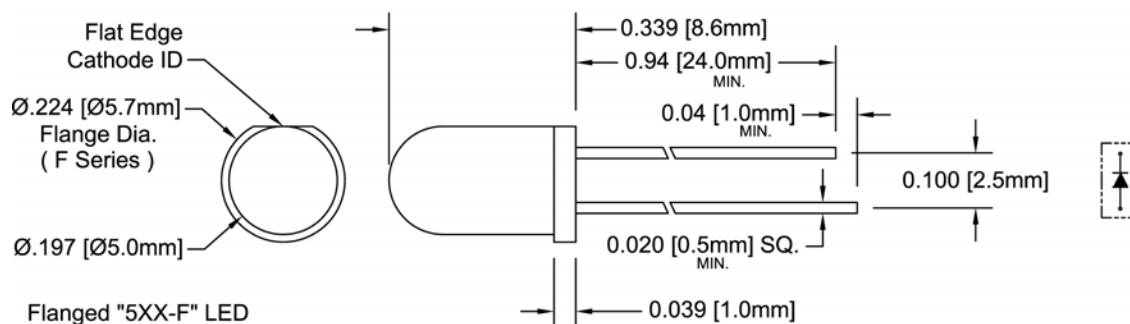
Part Number Designation



5mm (T1 3/4) Package Discrete LED BLUE



Outline Dimensions



Recommended Mounting
Hole Size = $\text{Ø}0.032^{+.003}_{-.002}$

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.

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

5mm (T1 3/4) Package Discrete LED BLUE



Absolute Maximum Ratings

T_A = 25°C unless otherwise noted

Power Dissipation	150 mW
Forward Current (DC)	25 mA
Peak Forward Current ¹	70 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 = 20 mA unless otherwise noted

Part Number	Forward Voltage (V) ¹			Recommend Forward Current (mA)			Reverse Current (μA)	Dominant Wavelength (nm) ²			Luminous Intensity I _v (mcd)			Viewing Angle 2 Θ ½ (deg)
	MIN	TYP	MAX	MIN	TYP	MAX		MIN	TYP	MAX	MIN	TYP	MAX	
5BWC-F	/	4.0	4.5	/	20	/	100	/	/	/	/	30	/	25
5BWD-F								/	/	/	/	15	/	40
5BWT-F								/	/	/	/	30	/	25
5BWC	/	4.0	4.5	/	20	/	100	/	/	/	/	30	/	20
5BWD								/	/	/	/	15	/	45
5BWT								/	/	/	/	30	/	20

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

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5mm (T1 ¾) Package Discrete LED BLUE



Typical Electrical / Optical Characteristics

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

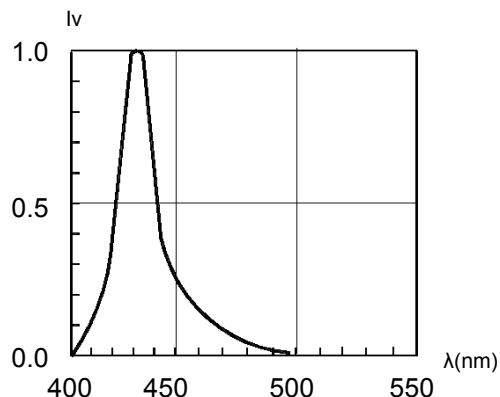


Fig. 1 Relative Luminous Intensity vs. Wavelength
@ 20mA

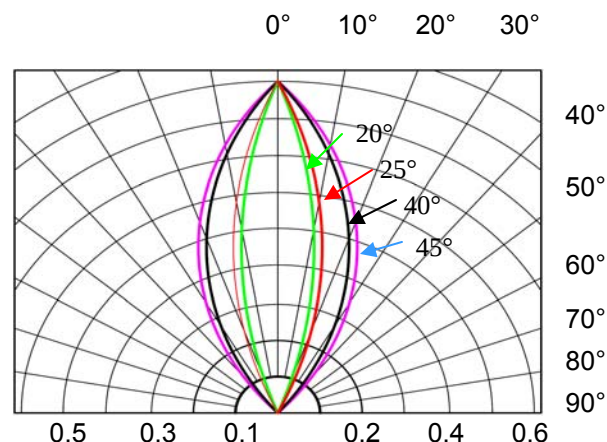


Fig. 2 Directivity Radiation Diagram

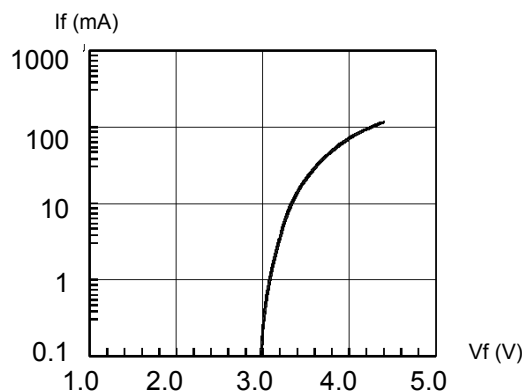


Fig. 3 Forward Current vs. Forward Voltage

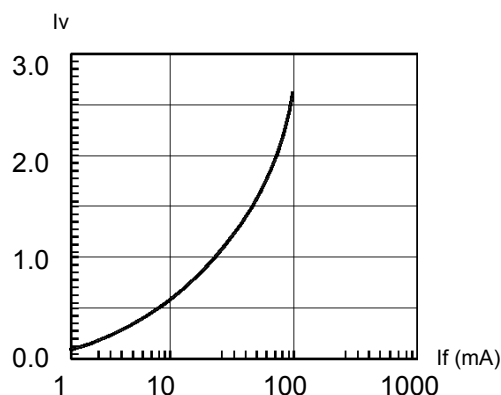


Fig. 4 Relative Luminous Intensity vs. Forward Current
Normalize @ 20 mA

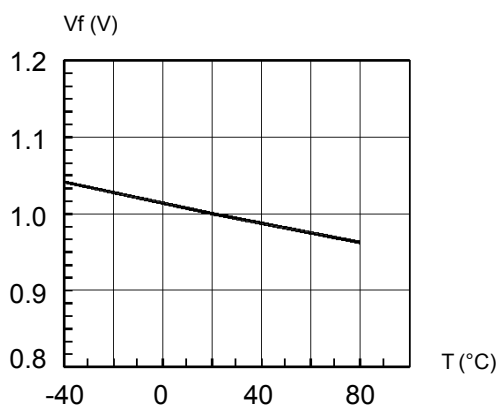


Fig. 5 Forward Voltage vs. Temperature

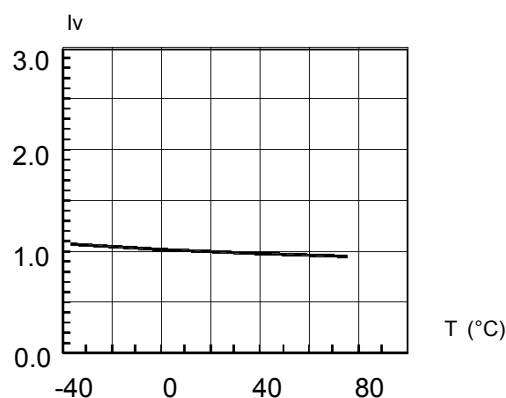


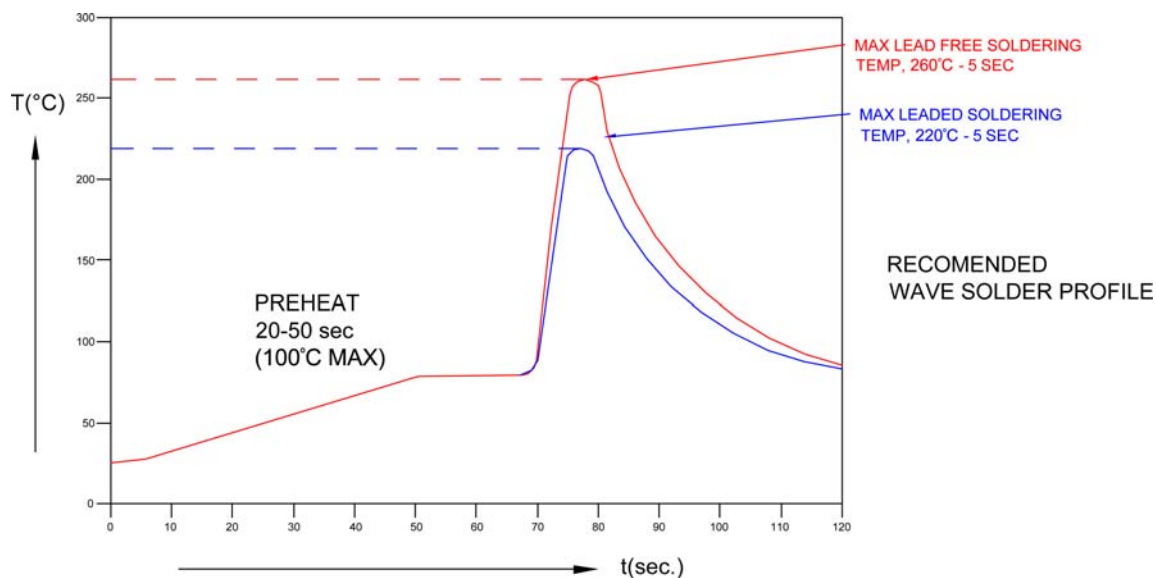
Fig. 6 Relative Luminous Intensity vs. Temperature

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5mm (T1 3/4) Package Discrete LED BLUE

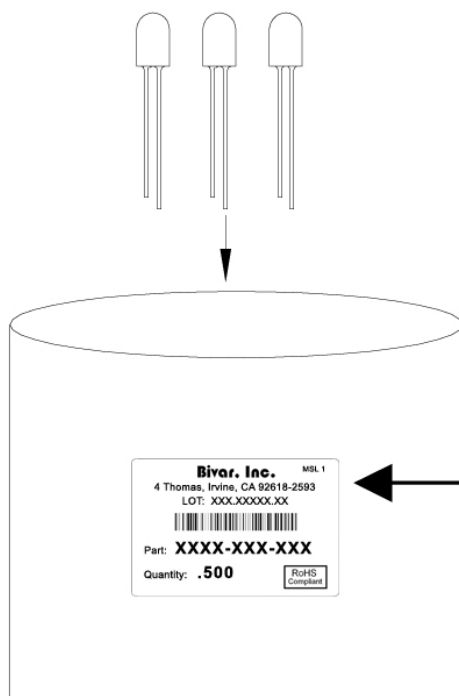


Recommended Soldering Conditions



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, Inc.	MSL 1
4 Thomas, Irvine, CA 92618-2593	
LOT: XXX.XXXXX.XX	
Part: XXXX-XXX-XXX	
Quantity: .500	
RoHS Compliant	

AntiStatic Poly Bag with Desiccant
(500 pcs Max. per Bag)

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