

# 5mm (T1 3/4) Package Discrete LED COOL WHITE

# BIVAR

## 5UWCXX.XXXC-X

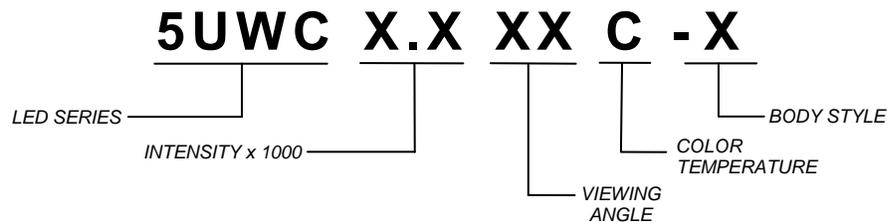
- ◆ Industry Standard 5mm (T1 3/4) Package
- ◆ RoHS Compliant
- ◆ Water Clear Lens
- ◆ 6500K Color Temperature
- ◆ Multiple Intensity and Viewing Angle Options
- ◆ Available in Flange and Standard LED Body styles
- ◆ Ideal for Status Indication and Display



Bivar's 5mm T1 3/4 Package 5UWC Series LED may be used in almost any application. They are offered in 6500K color temperature and come in multiple intensity, viewing angle, and body styles. Bivar offers a water clear LED lens for maximum light output. The Flange LED is ideal for Panel Mount Clip & Ring assemblies and the Standard LED is ideal for vertical spacer and holder assemblies.

Part Number	Material	Emitted Color	Color Temperature	Lens Appearance	Viewing Angle
5UWC16.025C-F	InGaN/Sapphire	WHITE	6500K	Water Clear	25°
5UWC20.025C-F					25°
5UWC16.030C					30°
5UWC20.030C					30°

## Part Number Designation

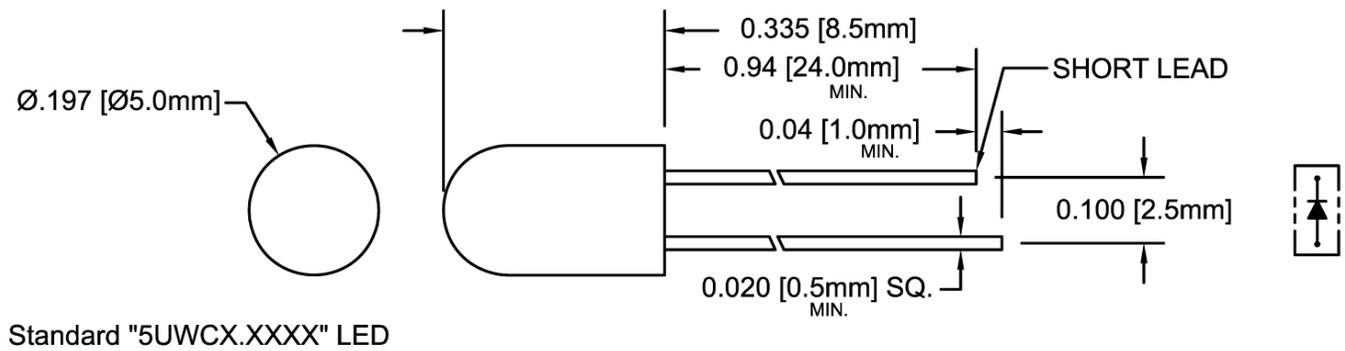
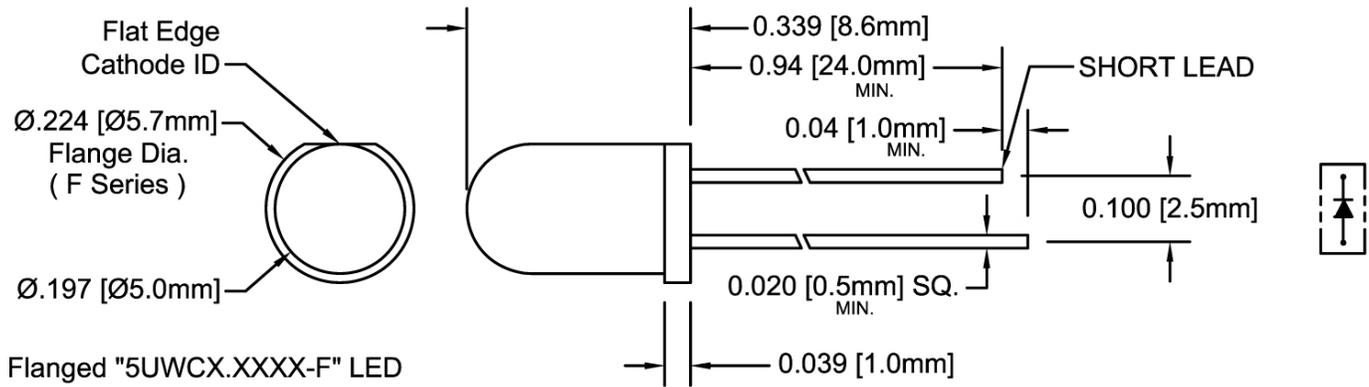


Bivar reserves the right to make changes at any time without notice.

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## 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:  $\pm 0.010''$  unless otherwise noted.
  3. Tolerance of overall epoxy outline:  $\pm 0.020''$  unless otherwise noted.
  4. Epoxy meniscus may extend to 0.060" max.

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## Absolute Maximum Ratings

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

Power Dissipation	120 mW
Forward Current ( DC )	30 mA
Peak Forward Current <sup>1</sup>	100 mA
Reverse Voltage	5 V
Operating Temperature Range	-25 ~ +80°C
Storage Temperature Range	-30 ~ +80°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

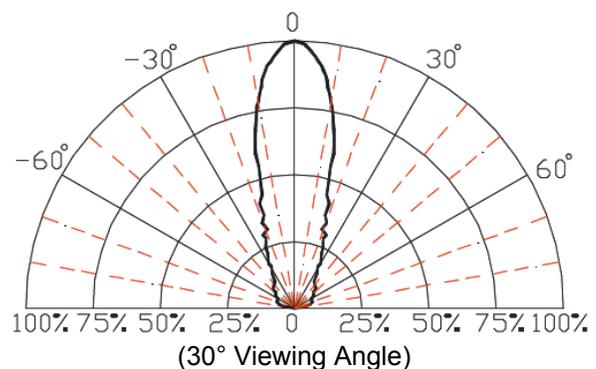
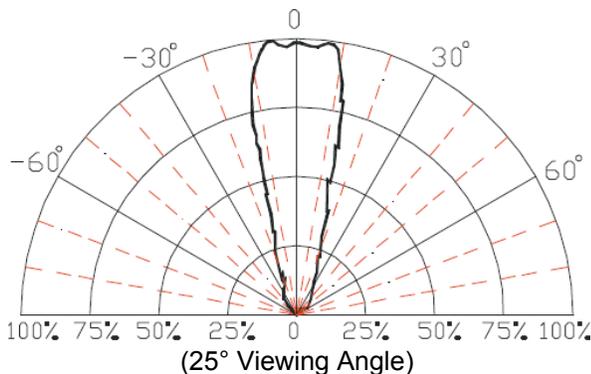
T<sub>A</sub> = 25°C & I<sub>F</sub> = 20 mA unless otherwise noted

Part Number	Forward Voltage (V) <sup>1</sup>			Recommend Forward Current (mA)			Reverse Current (μA)	CCT (Kelvin)			Luminous Intensity I <sub>v</sub> (mcd)			Viewing Angle 2Θ ½ (deg)
	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
5UWC16.025C-F	3.0	3.4	3.8	/	20	/	10	/	6500	/	14000	16000	/	25
5UWC20.025C-F								/	6500	/	18000	20000	/	25
5UWC16.030C	3.0	3.4	3.8	/	20	/	10	/	6500	/	14000	16000	/	30
5UWC20.030C								/	6500	/	18000	20000	/	30

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

## Directivity Radiation — Relative Luminous Intensity vs. Radiation Angle

T<sub>a</sub> = 25°C unless other noted



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## Typical Electrical / Optical Characteristics

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

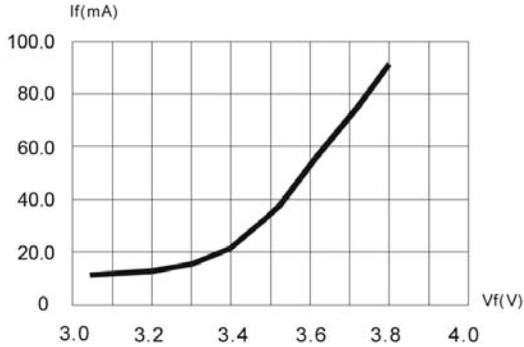


Fig. 1 Forward Current vs. Forward Voltage

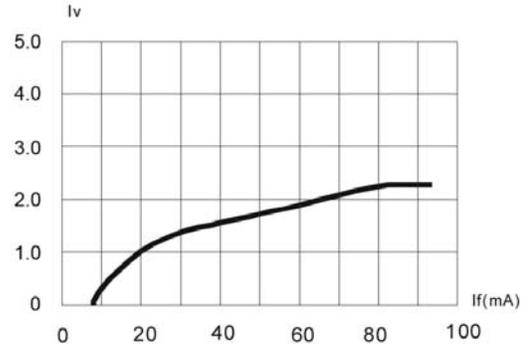


Fig. 2 Relative Luminous Intensity vs. Forward Current

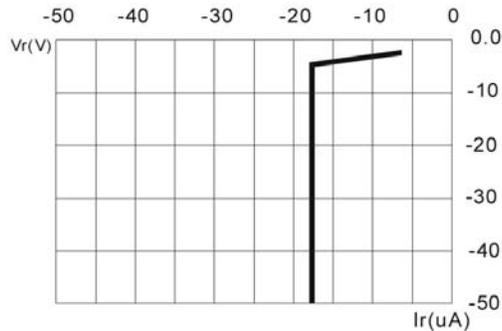


Fig. 3 Reverse Current vs. Reverse Voltage

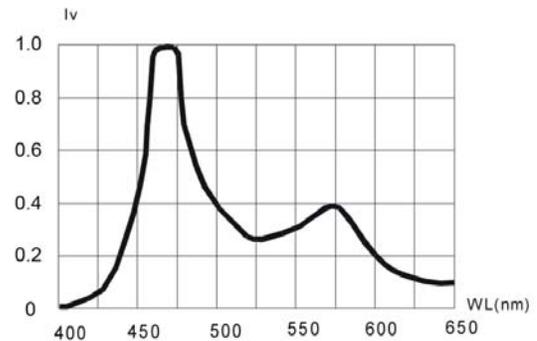


Fig. 4 Relative Luminous Intensity vs. Wavelength

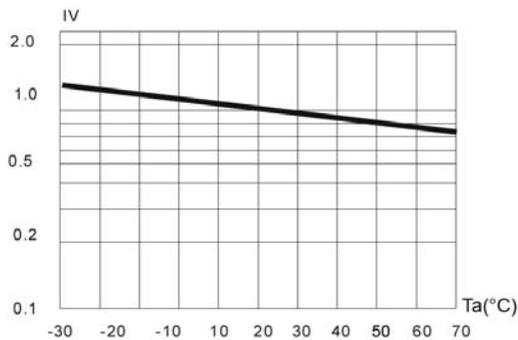


Fig. 5 Relative Luminous Intensity vs. Ambient Temperature

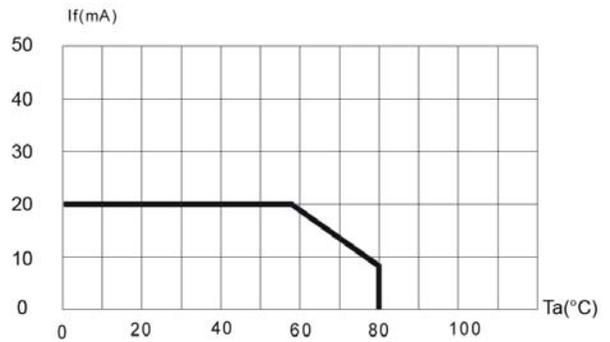


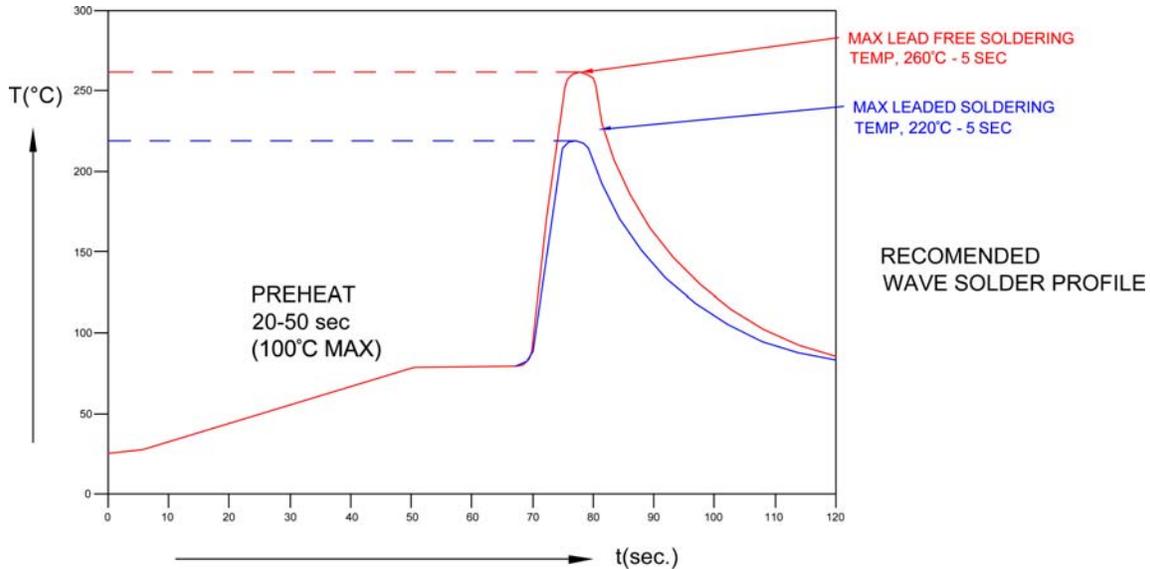
Fig. 6 Maximum Forward Current vs. Ambient Temperature

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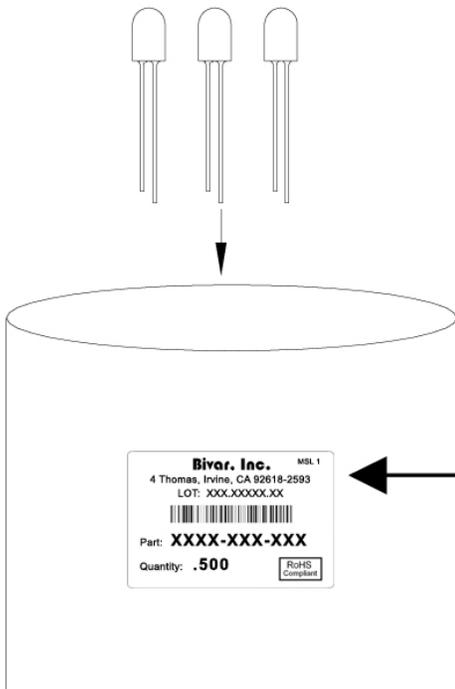


## Recommended Soldering Conditions



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)

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