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

# BIVAR

#### **5UWCXX.XXXC-X**

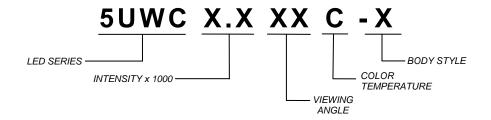
- ♦ Industry Standard 5mm (T1 3/4) Package
- RoHS Compliant
- ♦ Water Clear Lens
- ♦ 6500K Color Temperature
- **♦** Multiple Intensity and Viewing Angle Options
- Available in Flange and Standard LED Body styles
- Ideal for Status Indication and Display



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		WHITE			25°		
5UWC20.025C-F	InGaN/Sapphire		GEOOK	Water Clear	25°		
5UWC16.030C			6500K	Water Clear	30°		
5UWC20.030C					30°		

### **Part Number Designation**





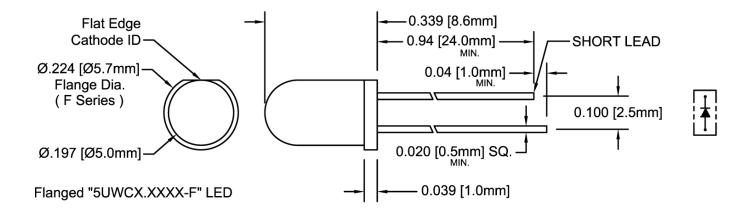


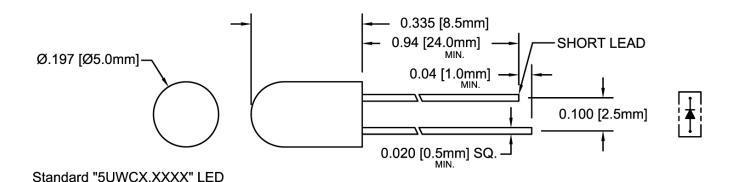


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#### **Outline Dimensions**





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.

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#### **Absolute Maximum Ratings**

 $T_A = 25^{\circ}C$  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 ) 2	260°C		

Notes: 1. 10% Duty Cycle, Pulse Width ≤ 0.1 msec.

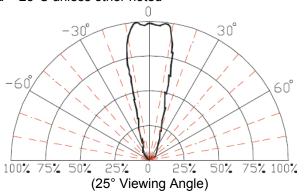
#### **Electrical / Optical Characteristics**

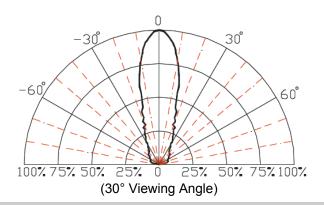
 $T_A = 25^{\circ}C \& I_F = 20 \text{ mA}$  unless otherwise noted

Part Number	Forward Voltage (V) <sup>1</sup>		Recommend Forward Current (mA)		Reverse Current (µA)	CCT (Kelvin)		Luminous Intensity Iv (mcd)			Viewing Angle 2 Θ 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	2.0	/	20	/	10	1	6500	/	14000	16000	1	25
5UWC20.025C-F			3.0					1	6500	/	18000	20000	1	25
5UWC16.030C	2.0	3.0 3.4 3.8	2.0	1	20	1	10	1	6500	/	14000	16000	/	30
5UWC20.030C	3.0		3.0					1	6500	/	18000	20000	1	30

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

## **Directivity Radiation** — Relative Luminous Intensity vs. Radiation Angle Ta = 25°C unless other noted





<sup>2.</sup> Solder time less than 5 seconds at temperature extreme.

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### **Typical Electrical / Optical Characteristics**

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

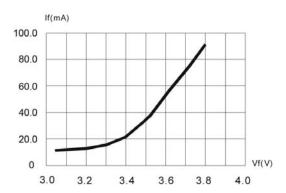


Fig. 1 Forward Current vs. Forward Voltage

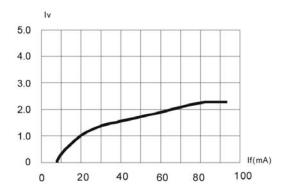


Fig.2 Relative Luminous Intensity vs. Forward Current

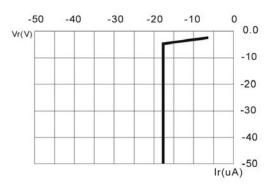


Fig. 3 Reverse Current vs. Reverse Voltage

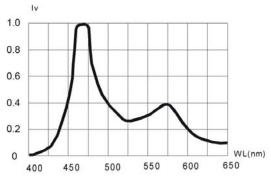


Fig. 4 Relative Luminous Intensity vs. Wavelength

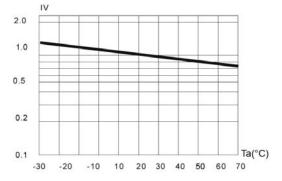


Fig. 5 Relative Luminous Intensity vs. Ambient Temperature

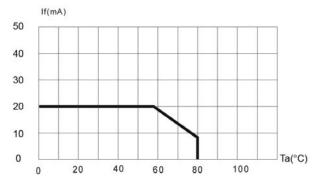


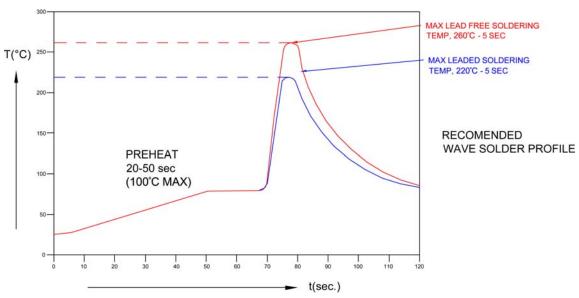
Fig. 6 Maximum Forward Current vs. Ambient Temperature

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

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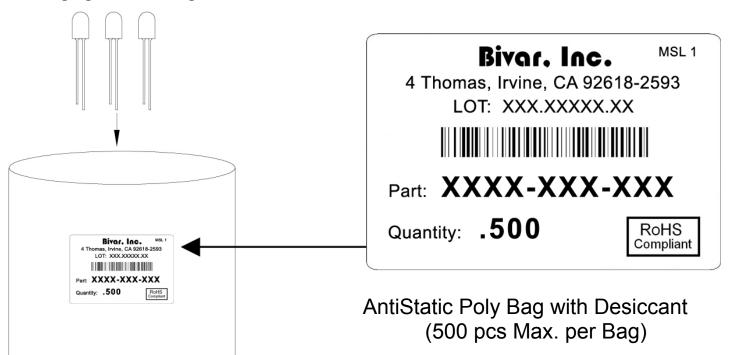


#### **Recommended Soldering Conditions**



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**



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