# 3mm (T1) Package Discrete LED COOL WHITE





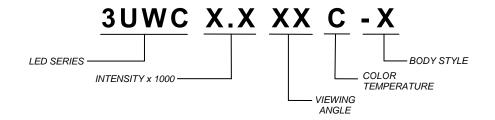
- ♦ Industry Standard 3mm (T1) Package
- RoHS Compliant
- ♦ Water Clear Lens
- ♦ 6500K Color Temperature
- Multiple Intensity and Viewing Angle Options
- Available in Flange and Standard LED Body styles
- Ideal for Backlighting, Status Indication, and Display



Bivar's 3mm T1 Package 3UWC 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		
3UWC5.035C-F		WHITE			35°		
3UWC8.035C-F	InGaN/Sapphire		GEOOK	Water Clear	35°		
3UWC5.030C			6500K	Water Clear	30°		
3UWC8.030C					30°		

### **Part Number Designation**





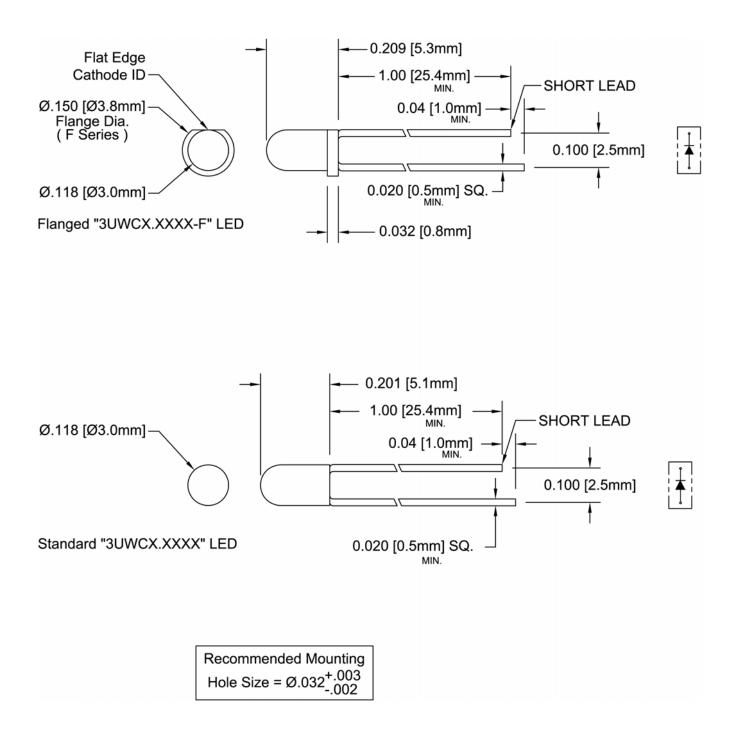




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#### **Outline Dimensions**



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.

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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>	100mA		
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.

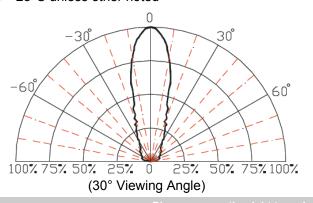
#### **Electrical / Optical Characteristics**

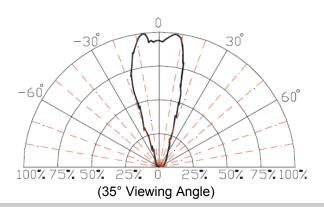
 $T_A = 25$ °C &  $I_F = 20$  mA unless otherwise noted

Part Number	Forward Voltage (V) <sup>1</sup>		Recommend Forward Current (mA)		Reverse Current (µA)	CCT (Kelvin)		Luminous Intensity Iv (mcd)			Viewing Angle 2 O ½ (deg)			
	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
3UWC5.035C-F		2.4	3.8	/	20	/	10	/	6500	1	4000	5000	/	35
3UWC8.035C-F	3.0	3.4						/	6500	1	6000	8000	/	35
3UWC5.030C	3.0 3.4	2.4	3.4 3.8	/	20	1	10	1	6500	1	4000	5000	/	30
3UWC8.030C		3.4						/	6500	1	6000	8000	/	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**

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

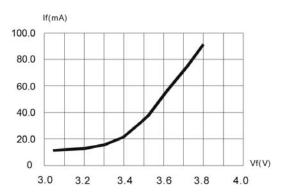


Fig. 1 Forward Current vs. Forward Voltage

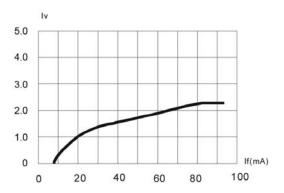


Fig. 2 Relative Luminous Intensity vs. Forward Current

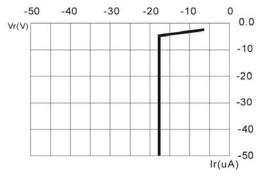


Fig. 3 Reverse Current vs. Reverse Voltage

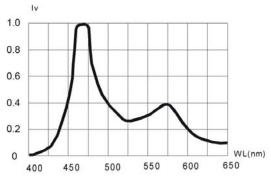


Fig. 4 Relative Luminous Intensity vs. Wavelength

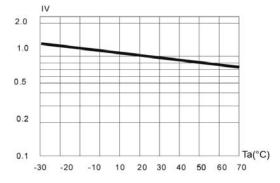


Fig. 5 Relative Luminous Intensity vs. Ambient Temperature

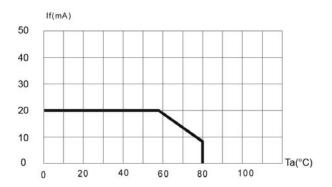
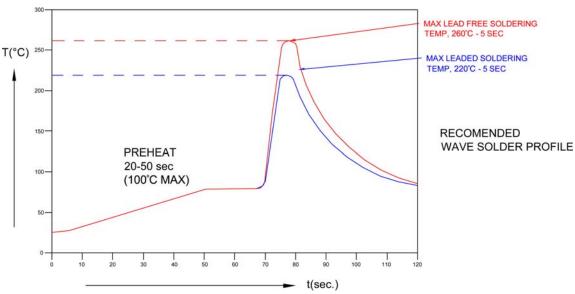


Fig. 6 Maximum Forward Current vs. Ambient Temperature

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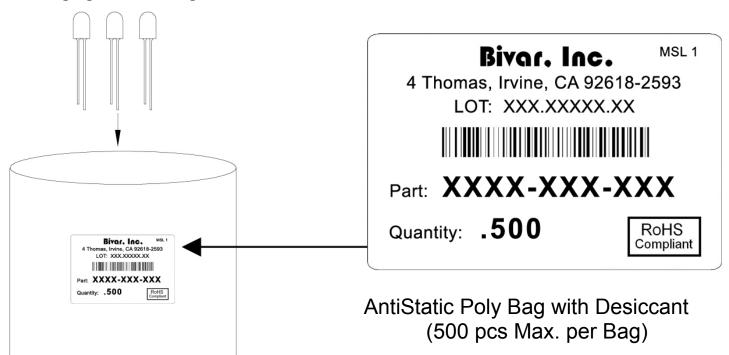


#### **Recommended Soldering Conditions**



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 reserves the right to make changes at any time without notice