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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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

#### 5UWCXX.XXXN-X

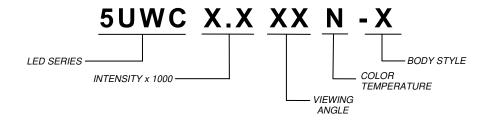
- ♦ Industry Standard 5mm (T1 3/4) Package
- RoHS Compliant
- Water Clear Lens
- **♦** 5000K Color Temperature
- Multiple Intensity and Viewing Angle Options
- Available in Flange and Standard LED Body styles
- Ideal for Status Indication and Display



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		
5UWC16.025N-F					25°		
5UWC20.025N-F	InCaN/Sanahira	WHITE	E000K	Water Clear	25°		
5UWC16.030N	InGaN/Sapphire	VVIIIE	5000K	Water Clear	30°		
5UWC20.030N					30°		

#### **Part Number Designation**





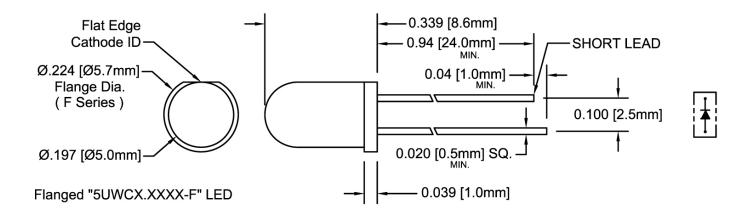


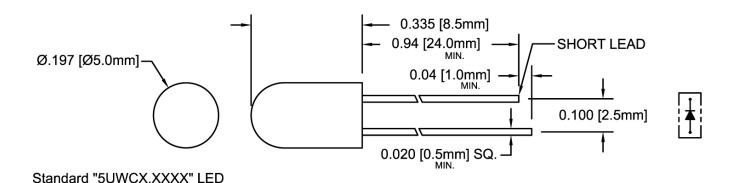


### 5mm (T1 3/4) Package Discrete LED **NEUTRAL WHITE**



#### **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.

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



#### **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.

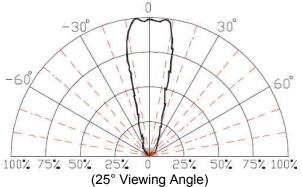
#### **Electrical / Optical Characteristics**

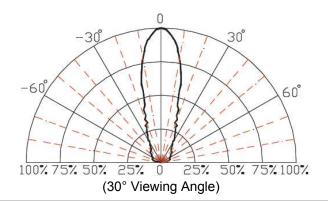
 $T_A = 25$ °C &  $I_F = 20$  mA unless otherwise noted

Part Number	Forward Voltage (V) <sup>1</sup>		Recommend Forward Current (mA)		Reverse Current (µA)	CCT (Kelvin)		Luminous Intensity Iv (mcd)			Viewing Angle 2 Θ ½ (deg)			
	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
5UWC16.025N-F	3.0	3.4 3.8	3.8	/	20	/	10	/	5000	/	14000	16000	/	25
5UWC20.025N-F	3.0   3.4	3.4	3.0					/	5000	/	18000	20000	/	25
5UWC16.030N	30 37	3.4	.4 3.8	,	20	,	10	/	5000	/	14000	16000	/	30
5UWC20.030N	3.0	0.0 3.4 3.6	,	20	/	10	1	5000	/	18000	20000	/	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.

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



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

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

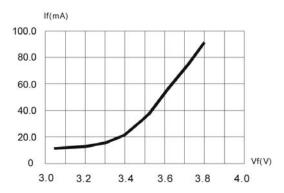


Fig. 1 Forward Current vs. Forward Voltage

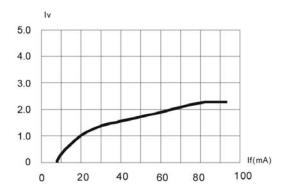


Fig.2 Relative Luminous Intensity vs. Forward Current

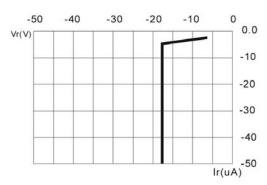


Fig. 3 Reverse Current vs. Reverse Voltage

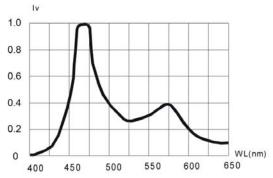


Fig. 4 Relative Luminous Intensity vs. Wavelength

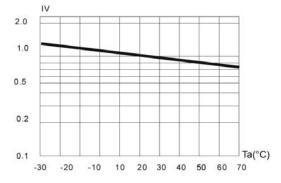


Fig. 5 Relative Luminous Intensity vs. Ambient Temperature

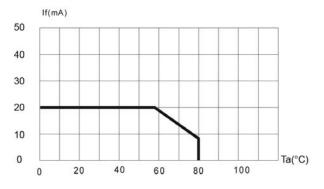


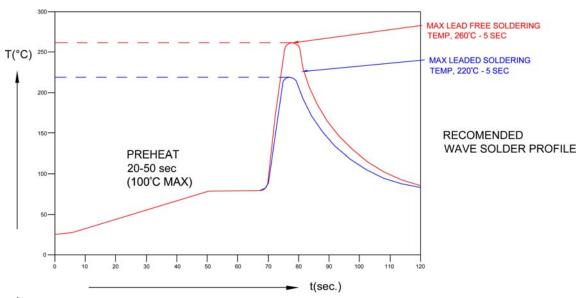
Fig. 6 Maximum Forward Current vs. Ambient Temperature

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

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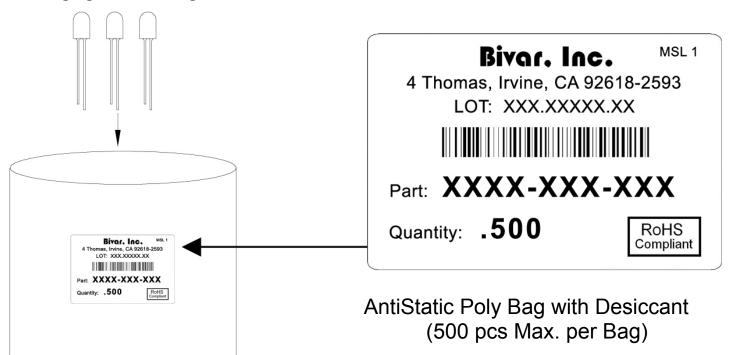


#### **Recommended Soldering Conditions**



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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