

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

BIVAR

5UWCXX.XXXC-X

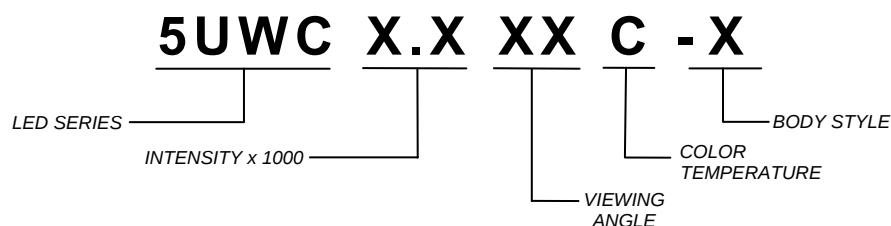
- ◆ Industry Standard 5mm (T1 3/4) Package
- ◆ RoHS Compliant
- ◆ Water Clear Lens
- ◆ 6500K Color Temperature
- ◆ Multiple Intensity and Viewing Angle Options
- ◆ Available in Flange and Standard LED Body styles
- ◆ Ideal for Status Indication and Display



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

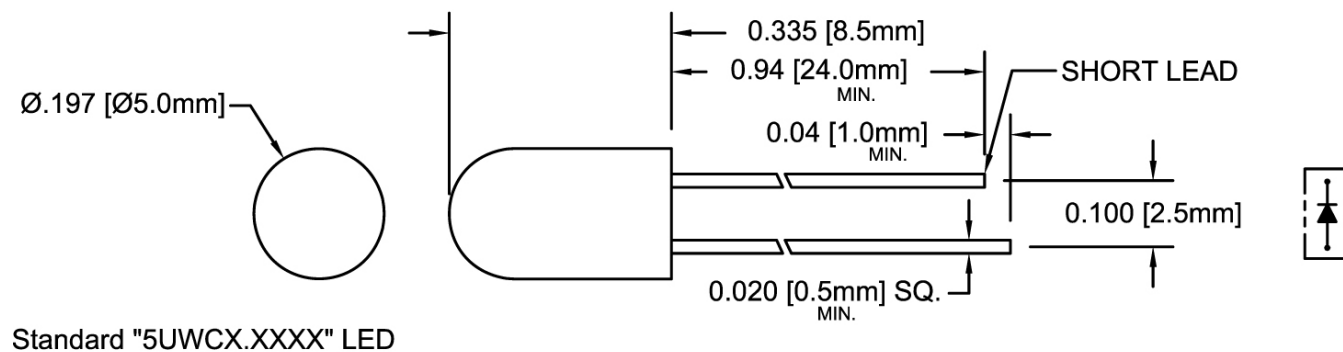
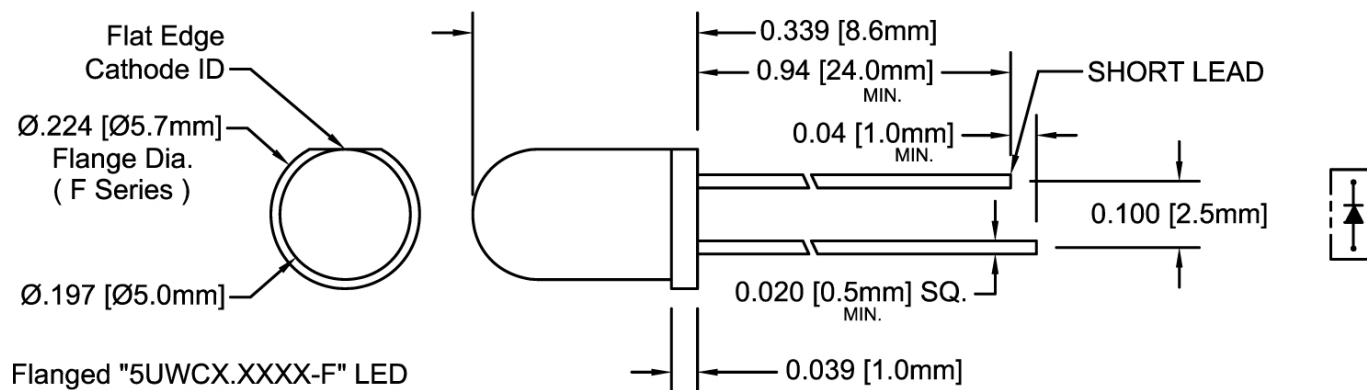


Bivar reserves the right to make changes at any time without notice.

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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: ± 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

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

Power Dissipation	120 mW
Forward Current (DC)	30 mA
Peak Forward Current ¹	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. 2. Solder time less than 5 seconds at temperature extreme.

Electrical / Optical Characteristics

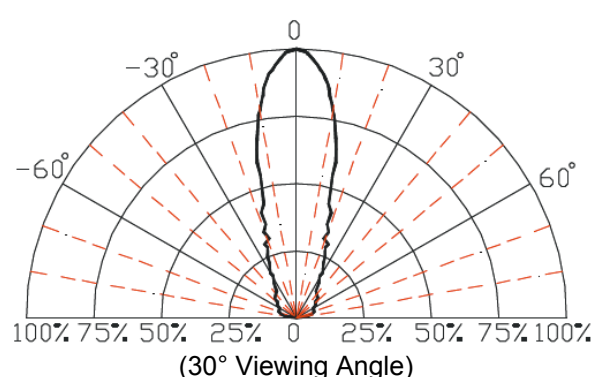
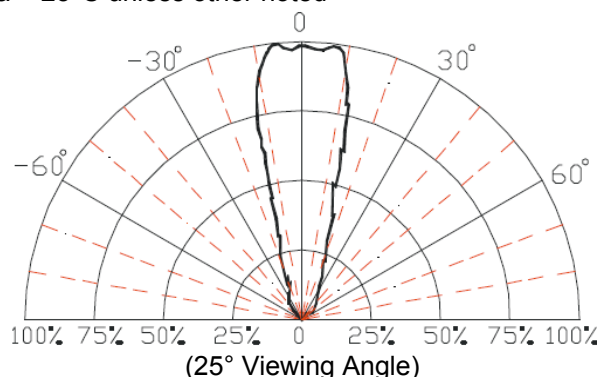
$T_A = 25^\circ\text{C}$ & $I_F = 20$ mA unless otherwise noted

Part Number	Forward Voltage (V) ¹			Recommend Forward Current (mA)			Reverse Current (μA)	CCT (Kelvin)			Luminous Intensity I_v (mcd)			Viewing Angle $2\theta_{1/2}$ (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 : $\pm 0.05\text{V}$.

Directivity Radiation — Relative Luminous Intensity vs. Radiation Angle

$T_a = 25^\circ\text{C}$ unless other noted



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Typical Electrical / Optical Characteristics

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

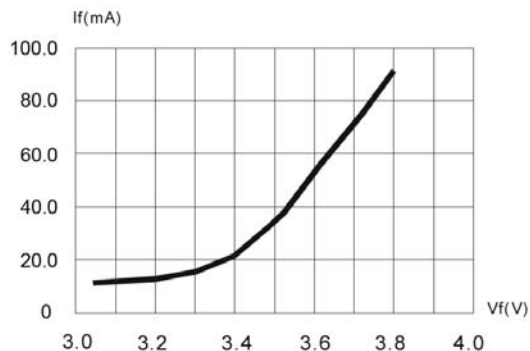


Fig.1 Forward Current vs. Forward Voltage

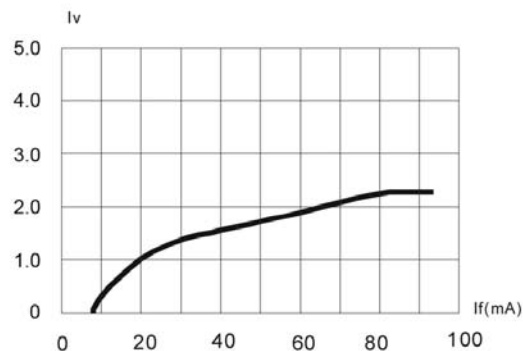


Fig.2 Relative Luminous Intensity vs. Forward Current

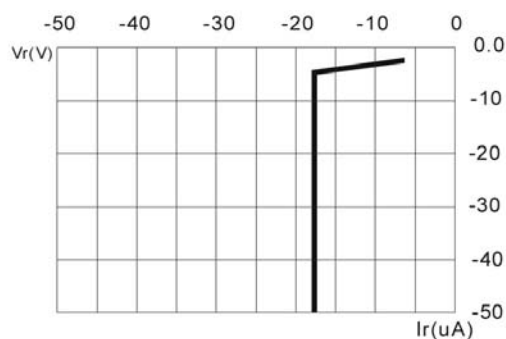


Fig.3 Reverse Current vs. Reverse Voltage

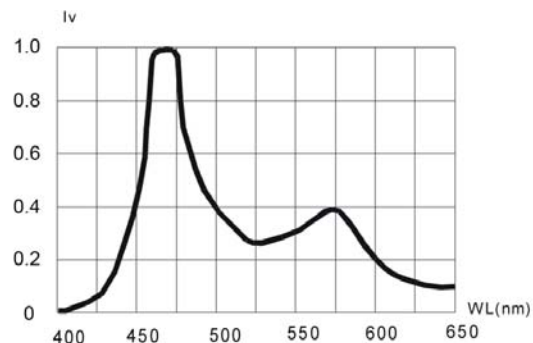


Fig.4 Relative Luminous Intensity vs. Wavelength

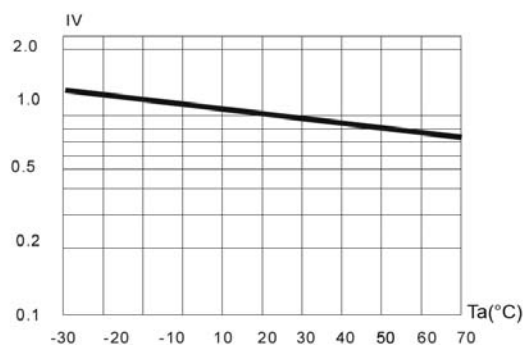


Fig.5 Relative Luminous Intensity
vs. Ambient Temperature

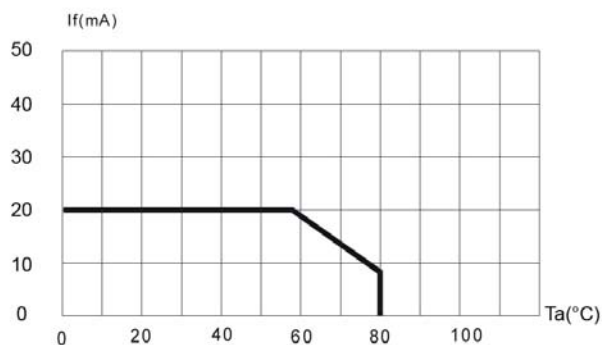


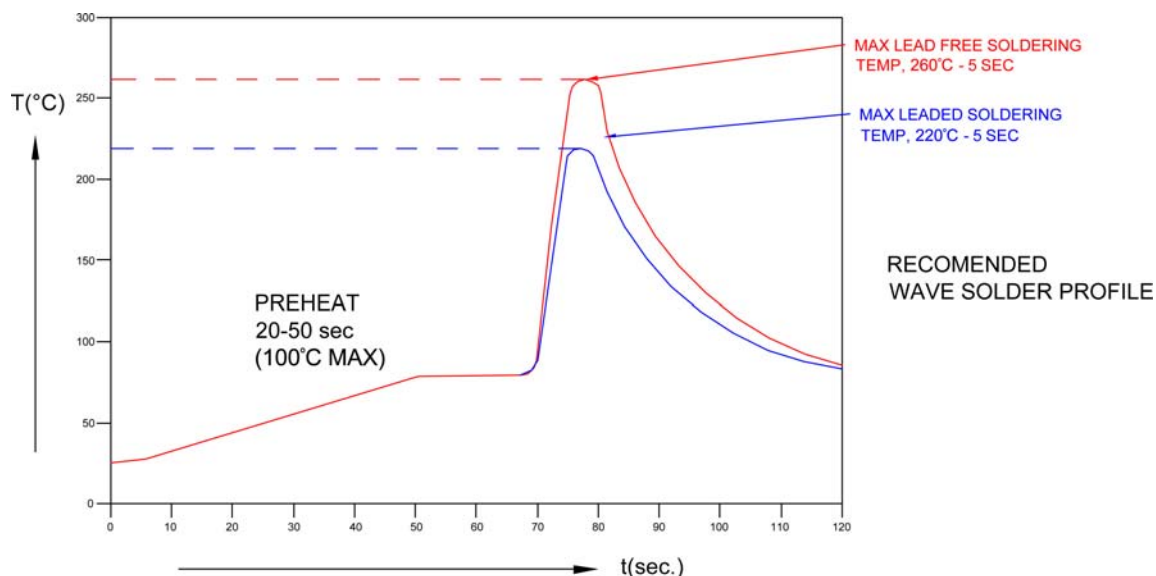
Fig.6 Maximum Forward Current
vs. Ambient Temperature

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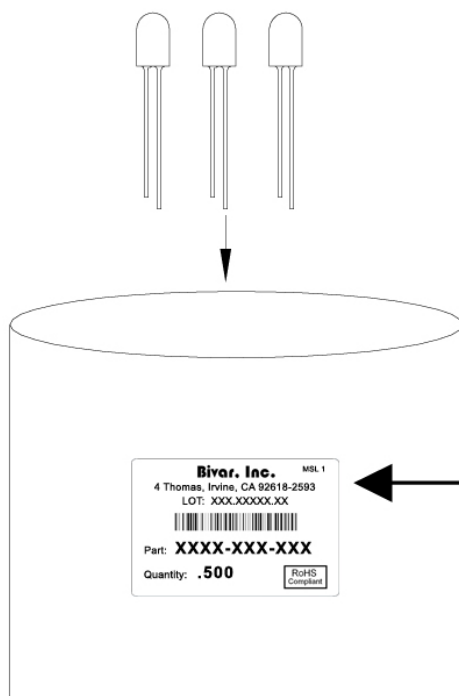
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Recommended Soldering Conditions



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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