

E SunLED
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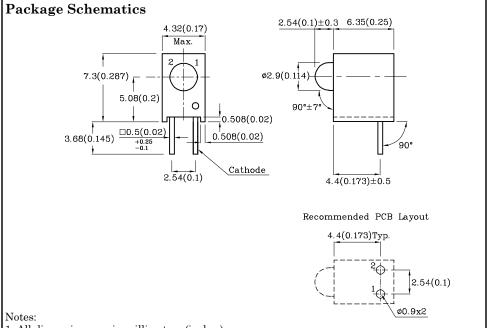
3mm One Position CBI Housing

Features

- Housing material: Type 66 Nylon
- Black casing provides superior contrast
- Housing UL rating: 94V-0
- \bullet Reliable & robust
- RoHS Compliant







- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25 (0.01")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)		Yellow (GaAsP/GaP)	Unit	
Reverse Voltage	V_{R}	5	V	
Forward Current	I_{F}	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	140	mA	
Power Dissipation	P_{D}	75	mW	
Operating Temperature	T_{A}	-40 ~ +85	$^{\circ}\mathrm{C}$	
Storage Temperature	Tstg	-40 ~ +85		
Lead Solder Temperature [2mm Below Package Base]		260°C For 3 Seconds		
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds			

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

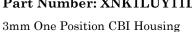
Operating Characteristics (T _A =25°C)	Yellow (GaAsP/GaP)	Unit	
Forward Voltage (Typ.) (I _F =10mA)	V_{F}	1.95	V
Forward Voltage (Max.) (I _F =10mA)		2.4	V
Reverse Current (Max.) (V _R =5V)	I_R	10	μA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =10mA)	λP	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =10mA)	λD	588*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =10mA)	Δλ	35	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	20	pF

 Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous Intensity} \\ \text{CIE127-2007*} \\ \text{(I}_{\text{F}}\text{=}10\text{mA}) \\ \text{mcd} \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XNK1LUY11D	Yellow	GaAsP/GaP	Yellow Diffused	8*	14*	590*	50°

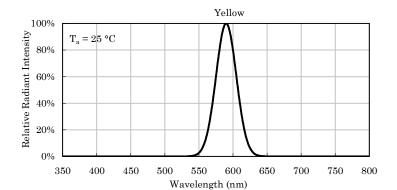
^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Dec 02,2020

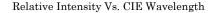


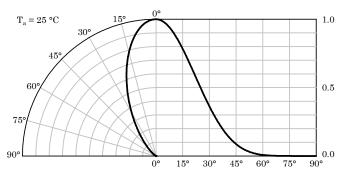






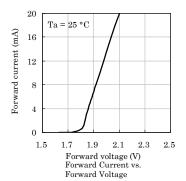
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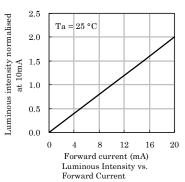


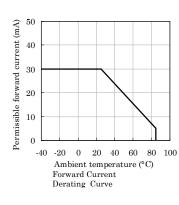


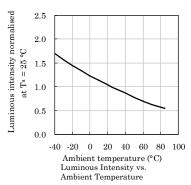
Spatial Distribution

❖ Yellow

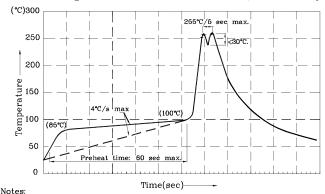








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



1.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C 2.Peak wave soldering temperature between 245°C ~ 255°C for 3 sec

(5 sec max).

3.Do not apply stress to the epoxy resin while the temperature is above $85\,^{\circ}\text{C}.$ 4.Fixtures should not incur stress on the component when mounting and

during soldering process. 5.SAC 305 solder alloy is recommended.

6. No more than one wave soldering pass.

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength),

the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm

2. Luminous Intensity / Luminous Flux: +/-15%

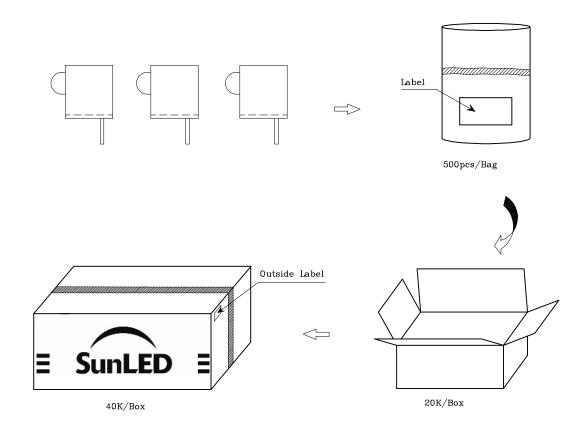
3. Forward Voltage: +/-0.1V

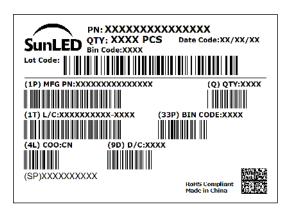
Note: Accuracy may depend on the sorting parameters.





PACKING & LABEL SPECIFICATIONS





TERMS OF USE

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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
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- 6. Additional technical notes are available at https://www.SunLEDusa.com/TechnicalNotes.asp

XDSB8820 V2-Z Layout: Maggie L.