

Part Number: XNN1LUGR86M

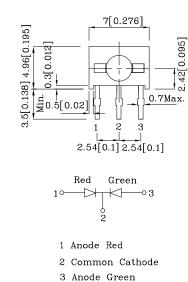
3mm One Position CBI Housing

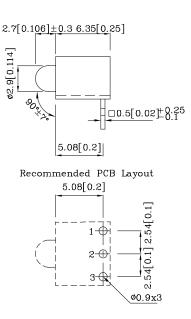
Features

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



Package Schematics





Notes:

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 (TA=25°C)		Red (GaAsP/ GaP)	Green (GaP)	Unit	
Reverse Voltage	$V_{\rm R}$	5	5	V	
Forward Current	$\mathbf{I}_{\mathbf{F}}$	30	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	160	140	mA	
Power Dissipation	\mathbf{P}_{D}	75	62.5	mW	
Operating Temperature	TA	-40 ~	°C		
Storage Temperature	Tstg	-40 ~			
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)		Red (GaAsP/ GaP)	Green (GaP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	$V_{\rm F}$	2	2.2	v
Forward Voltage (Max.) (I _F =20mA)	$V_{\rm F}$	2.5	2.5	v
Reverse Current (Max.) (V _R =5V)	I_R	10	10	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λP	627*	565*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =20mA)	λD	617*	568*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$ riangle \lambda$	45	30	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	15	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	LuminousIntensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
Red XNN1LUGR86M	Red	GaAsP/GaP	White Diffused –	12 10*	29 23*	627*	60°
	Green	GaP		12 12*	29 29*	565*	

*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Feb 26.2019

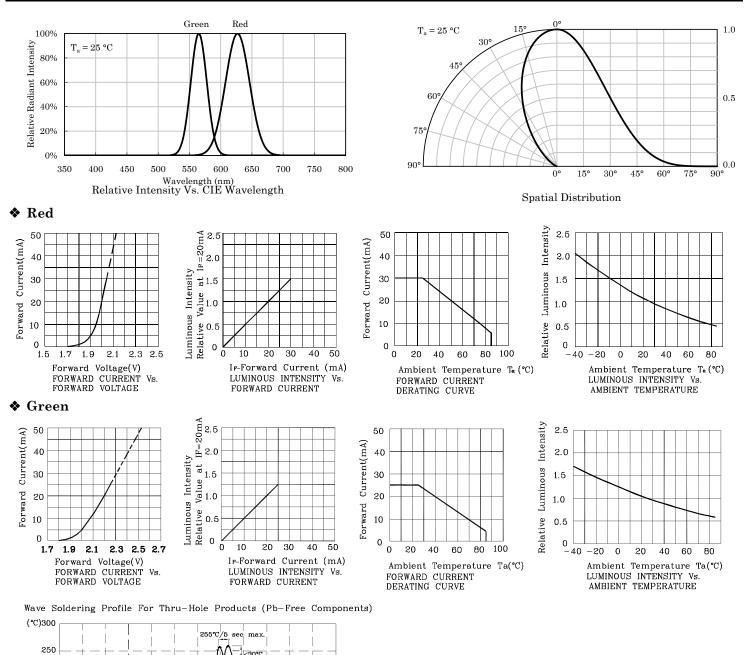
XDSA2765 V10-X Layout: Maggie L.



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3mm One Position CBI Housing



Remarks:

<30

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.

200

100 (8

50

0

(5 sec max).

4°C/s ma

Preheat

time:

(100°C)

60 sec max.

Time(sec)

Notes:
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 gas max)

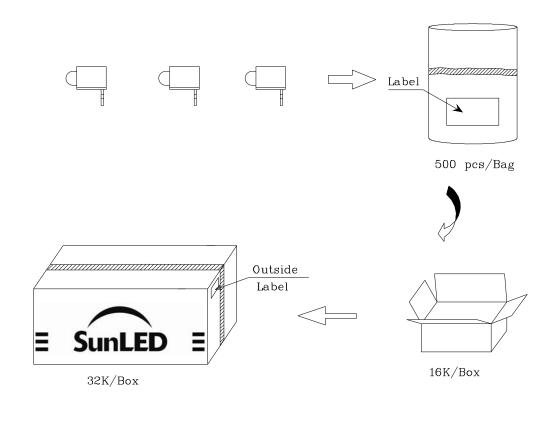
3.Do not apply stress to the epoxy resin while the temperature is above 85°C. 4.Fixtures should not incur stress on the component when mounting and during soldering process. 5.SAC 305 solder alloy is recommended. 6.No more than one wave soldering pass.

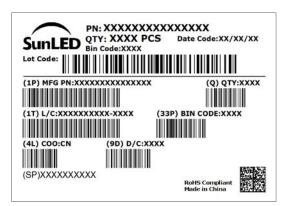
Temperature 150

Notes:



PACKING & LABEL SPECIFICATIONS





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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet. User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
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- 6. Additional technical notes are available at <u>https://www.SunLEDusa.com/TechnicalNotes.asp</u>

Feb 26,2019