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3mm One Position CBI Housing

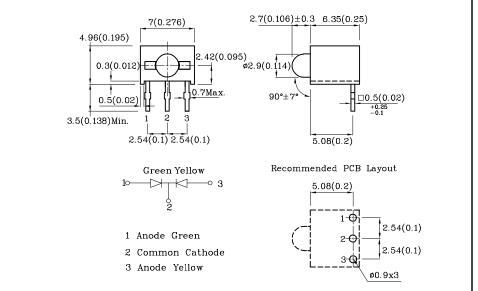
### **Features**

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





# 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 (T <sub>A</sub> =25°C)		Green (GaP)	Yellow (GaAsP/ GaP)	Unit	
Reverse Voltage	$V_{\mathrm{R}}$	5	5	V	
Forward Current	$I_{\mathrm{F}}$	I <sub>F</sub> 25 3		mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	140	140	mA	
Power Dissipation	$P_D$	62.5	75	mW	
Operating Temperature	$T_{A}$	-40 ~ +85		°C	
Storage Temperature	Tstg	-40 ~ +85		1 -0	
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 <sub>A</sub> =25°C)	Green (GaP)	Yellow (GaAsP/ GaP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.2	2.1	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)		2.5	2.5	V
Reverse Current (Max.) $(V_R=5V)$	$I_{R}$	10	10	μΑ
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λΡ	565*	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	568*	588*	nm
$\begin{tabular}{ll} Spectral Line Full Width \\ At Half-Maximum (Typ.) \\ (I_F=20mA) \\ \\ Capacitance (Typ.) \\ (V_F=0V, f=1MHz) \\ \\ \end{tabular}$		30	35	nm
		15	20	pF

Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} Luminous\ Intensity\\ CIE127\text{-}2007^*\\ (I_F\text{=}20\text{mA})\ mcd \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XNN1LUGY86M	Green	GaP	White Diffused -	18*	39*	565*	60°
AININ ILUG I 80M	Yellow	GaAsP/GaP		10*	19*	590*	

<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Nov 26,2020

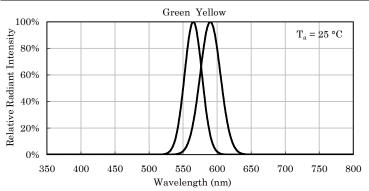
XDSA2767 V10-Z Layout: Maggie L.



## Part Number: XNN1LUGY86M

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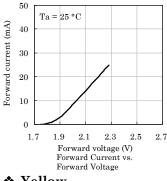


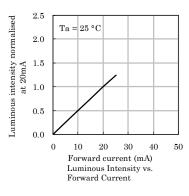


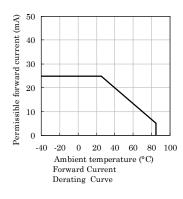
Relative Intensity Vs. CIE Wavelength

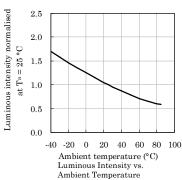
## $T_a = 25$ °C 1.0 45 60 0.5 0.0 15° 30° 45° 60° 759 90° Spatial Distribution

#### Green

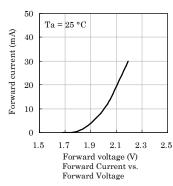


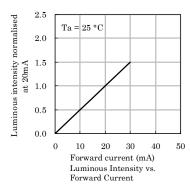


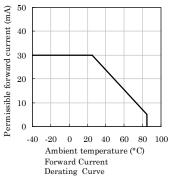


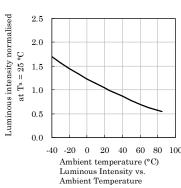


## Yellow

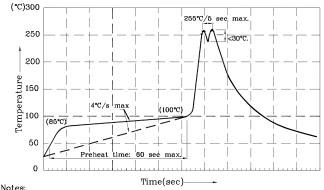








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



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

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°C. 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:

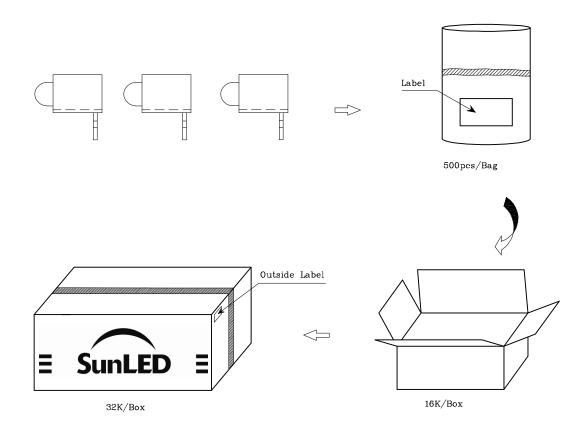
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

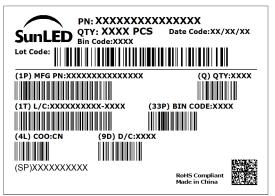
Note: Accuracy may depend on the sorting parameters.





### PACKING & LABEL SPECIFICATIONS





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