

SunLED www.SunLEDusa.com

3 mm One Position CBI Housing

2.54(0.1)

ø0.9x3

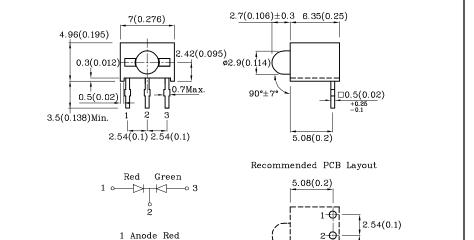
Features

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

2 Common Cathode 3 Anode Green

Absolute Maximum Ratings (T _A =25°C)		Red (GaAsP/ GaP)	Green (GaP)	Unit	
Reverse Voltage	$V_{\rm R}$	5	5	V	
Forward Current	I_{F}	30	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	160	140	mA	
Power Dissipation	P_{D}	75	62.5	mW	
Operating Temperature	$T_{\rm A}$	-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_{F}	2	2.2	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.5	2.5	V
Reverse Current (Max.) $(V_R=5V)$	I_R	10	10	μΑ
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)	Δλ	45	30	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	15	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} Luminous Intensity \\ CIE127\text{-}2007* \\ (I_F\text{=}20\text{mA}) \text{ mcd} \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
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 13.2023

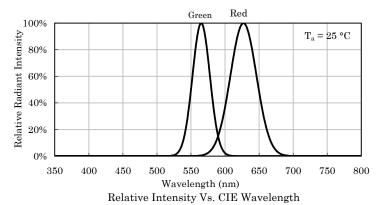
XDSA2765 V11-X Layout: Maggie L.



Part Number: XNN1LUGR86M

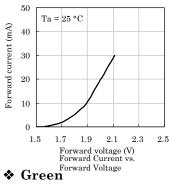
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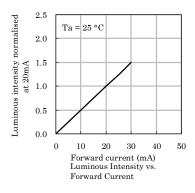


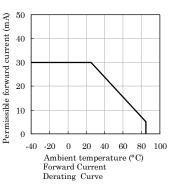


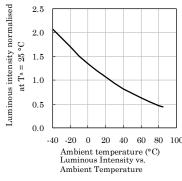
$T_a=25~^{\circ}\mathrm{C}$ 1.0 45 60 0.5 75 0.0 75° 15° 30° 60° 90° 45° Spatial Distribution

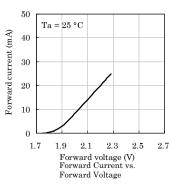
❖ Red

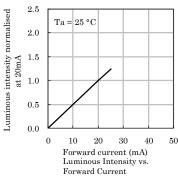


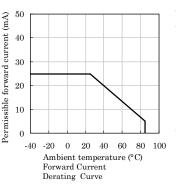


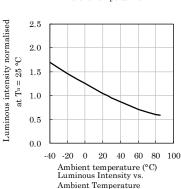




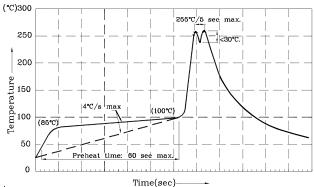








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



- 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).
- (8 sec links).

 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.

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:

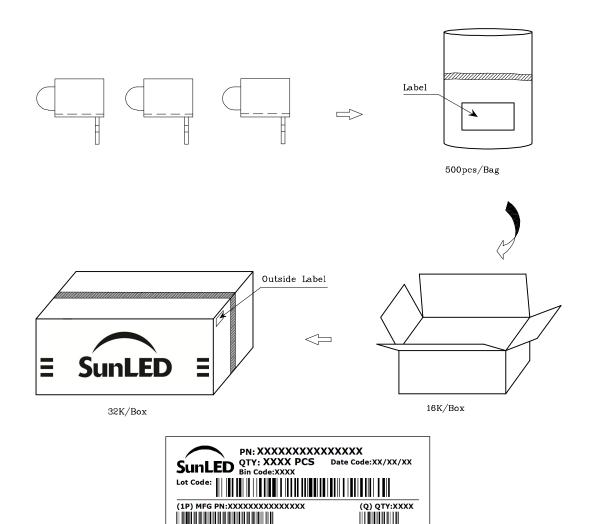
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.





PACKING & LABEL SPECIFICATIONS



TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- $2. \ Contents \ within \ this \ document \ are \ subject \ to \ improvement \ and \ enhancement \ changes \ without \ notice.$
- 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.

(SP)XXXXXXXXXX

- 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.
- 5. The performance of the product(s) should be evaluated and verified by the customer to ensure it can meet the customer's application requirements.
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- 7. Additional technical notes are available at https://www.SunLEDusa.com/TechnicalNotes.asp