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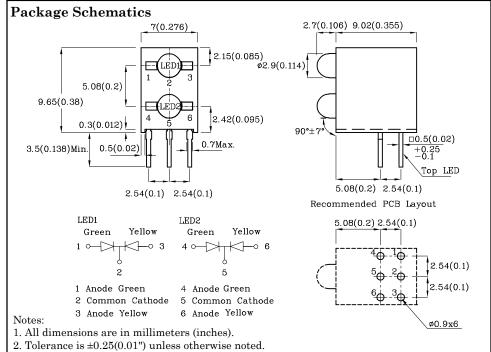
3 mm Two Position CBI Housing

### **Features**

- Housing material: Type 66 Nylon
- Black casing provides superior contrast
- Housing UL rating: 94V-0
- Reliable & robust
- Custom color combinations available
- Halogen-free
- RoHS Compliant







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	$I_{\mathrm{F}}$	25	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	140	140	mA	
Power Dissipation	$P_D$	62.5	75	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 <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)	$V_{\mathrm{F}}$	2.5	2.5	V
Reverse Current (Max.) $(V_R=5V)$	$I_R$	10	10	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λP	565*	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	568*	588*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	30	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	20	pF

Luminous Intensity

	Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous Intensity} \\ \text{CIE127-2007*} \\ \text{(I_F=20mA)} \\ \text{mcd} \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
					min.	typ.		
	WYOOT HOWOOM	Green	GaP	White Diffused -	18*	39*	565*	60°
XVO2LUGY86M —	Yellow	GaAsP/GaP	winte Diffused -	10*	19*	590*	60-	

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

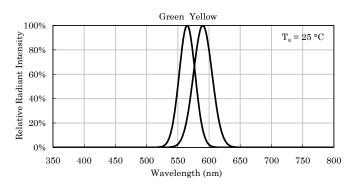
Wavelength



### Part Number: XVO2LUGY86M

3 mm Two Position CBI Housing

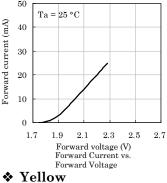




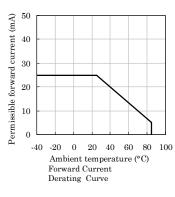
Relative Intensity Vs. CIE Wavelength

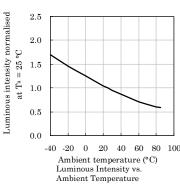
### 1.0 15 $T_a = 25 \, ^{\circ}C$ 309 45 60 0.5 909 0.0 15° 30° 45° 60° 75° 90° Spatial Distribution

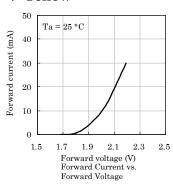
**❖** Green

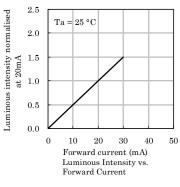


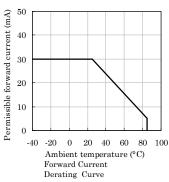
2.5 Luminous intensity normalised Ta = 25 °C 2.0 1.5 at 20mA 1.0 0.5 0.0 0 20 50 Forward current (mA) Luminous Intensity vs. Forward Current

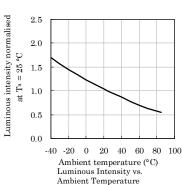




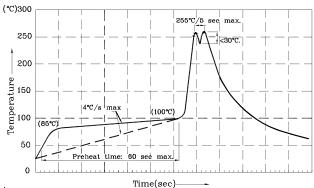








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



- 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:

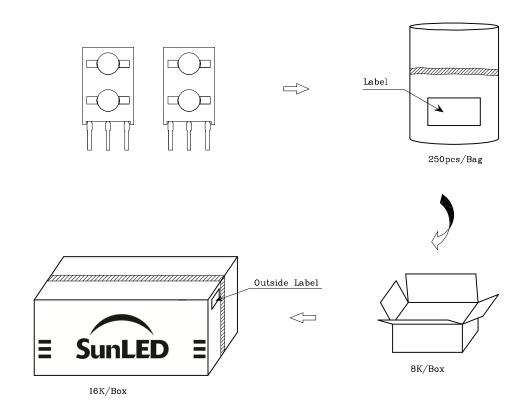
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

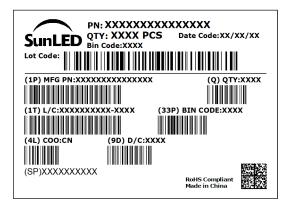
Note: Accuracy may depend on the sorting parameters.





## PACKING & LABEL SPECIFICATIONS





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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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- 7. Additional technical notes are available at <a href="https://www.SunLEDusa.com/TechnicalNotes.asp">https://www.SunLEDusa.com/TechnicalNotes.asp</a>

XDSA9664 V7-Z Layout: Maggie L.