



T-1 (3mm) BI-LEVEL LED INDICATOR

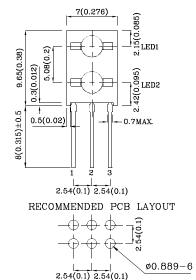
# **Features**

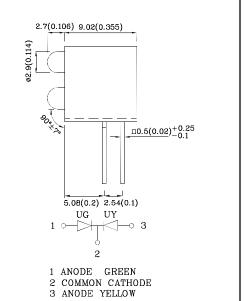
- Housing material: Type 66 Nylon
- Black casing provides superior contrast
- Housing UL rating: 94V-0
- Reliable & robust
- Custom color combinations available
- RoHS Compliant





# 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)		UG (GaP)	UY (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	$i_{\rm FS}$	140	40 140		
Power Dissipation	$P_{D}$	62.5	75	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85		°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				

Operating Characteristics (T <sub>A</sub> =25°C)	UG (GaP)	UY (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	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)		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

	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.		
	XVO2LUGY86M8	Green	GaP	White Diffused -	18*	39*	565*	60°
		Yellow	GaAsP/GaP		10*	19*	590*	

<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Dec 26.2013

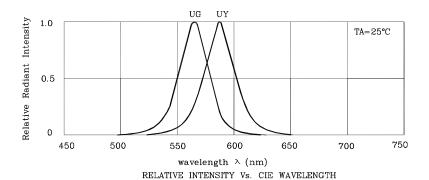
XDSA2801 V8-Z Layout: Maggie L.

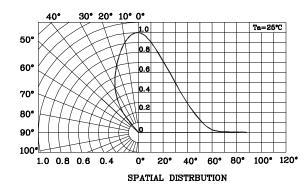




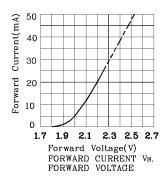


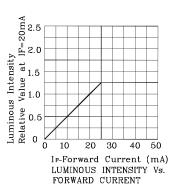
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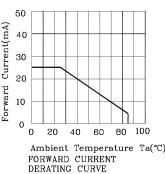


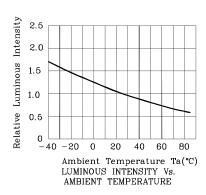


# **♦** UG

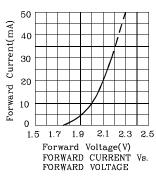


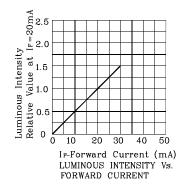


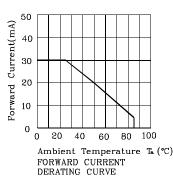


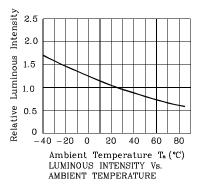


# UY

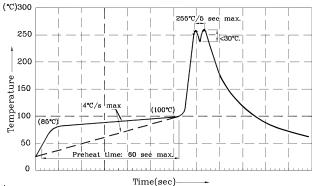








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



- 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.

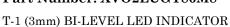
## Remarks:

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:

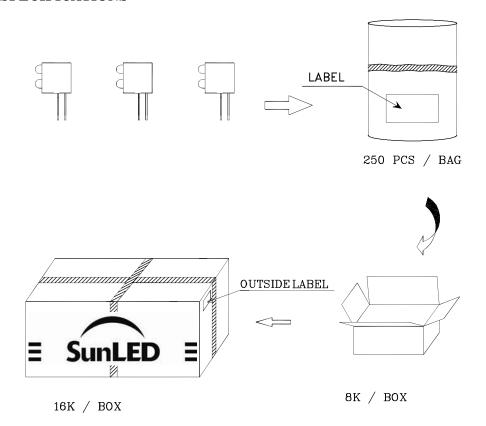
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

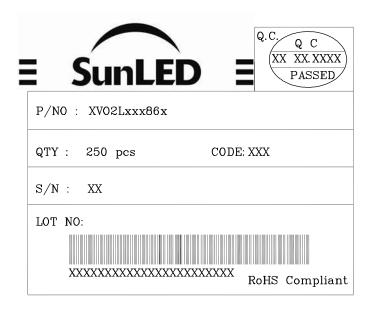
Note: Accuracy may depend on the sorting parameters.



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## PACKING & LABEL SPECIFICATIONS





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Dec 26,2013