



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

### **Features**

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





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#### Notes:

1. All dimensions are in millimeters (inches).

2.54(0.1) 2.54(0.1)

- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

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Absolute Maximum Ratings (T <sub>A</sub> =25°C)		UR (GaAsP/ GaP)	UG (GaP)	Unit
Reverse Voltage	$V_{\mathrm{R}}$	5	5	V
Forward Current	$I_{\mathrm{F}}$	30	25	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	160	140	mA
Power Dissipation	$P_{D}$	75	62.5	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)		UR (GaAsP/ GaP)	UG (GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2	2.2	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)	λΡ	627*	565*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	617*	568*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	45	30	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	15	pF

2 COMMON CATHODE 3 ANODE GREEN

	Part Number	Emitting Color	Emitting Material	Lens-color CIE12		Intensity -2007* A) mcd	Wavelength CIE127-2007* nm λP	Angle 20 1/2
					min.	typ.		
	VIO OI LICEDO EMO	Red	GaAsP/GaP	- White Diffused -	12 10*	29 23*	627*	600
XVO2LUGR86M8 —	Green	GaP	wnite Diffused –	12 12*	29 29*	565*	60°	

<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Dec 26,2013

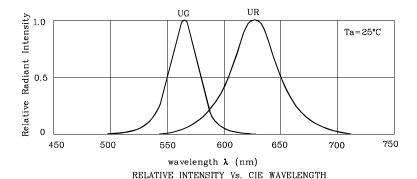
XDSA2799 V8-X Layout: Maggie L.





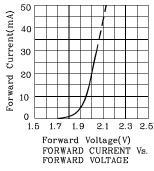


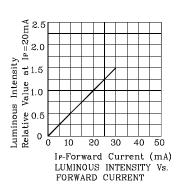


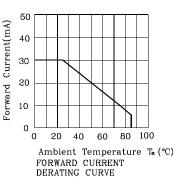


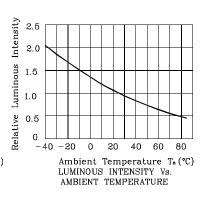
40° 30° 20° 10° 0° Ta=25°C 50° 60° 70° 80° 90° 100 1.0 0.8 0.6 0.4 20° 40° 60° 80° 100° 120° SPATIAL DISTRBUTION

# **UR**

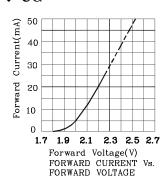


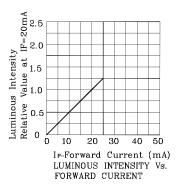


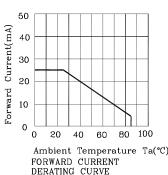


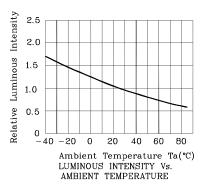


### UG

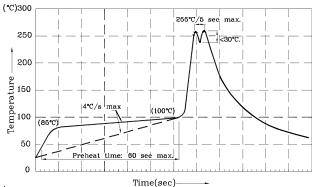








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



- 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),

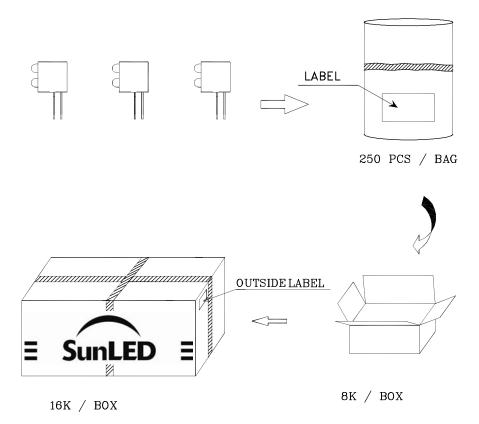
the typical accuracy of the sorting process is as follows:

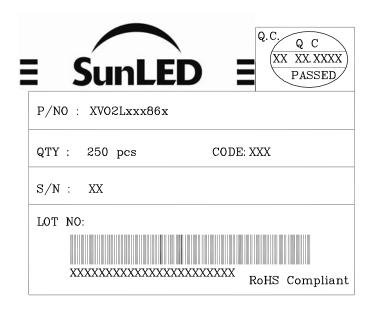
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



### PACKING & LABEL SPECIFICATIONS





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Dec 26,2013

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