

## Part Number: XLUY13D



# 2mm FLAT TOP LED LAMP

### Features

- Radial / Through hole package
- $\bullet$  Reliable & robust
- Low power consumption
- Available on tape and reel
- $\bullet$  RoHS Compliant



Package Schematics
2.5(0.098) 8(0.315) 27(1.063)Min. 3.5(0.138) 1.5(0.059)±1 Cathode 0 0 0 0 0 0 0 0
Notes: 1. All dimensions are in millimeters (inches). 2. Tolerance is ±0.25(0.01") unless otherwise noted.

3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Yellow (GaAsP/GaP)	Unit		
Reverse Voltage	$V_{R}$	5	V		
Forward Current	$I_{\rm F}$	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	140	mA		
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	75	mW		
Operating Temperature	$T_A$ -40 ~ +85				
Storage Temperature	Tstg	-40 ~ +85	°C		
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds				
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds				

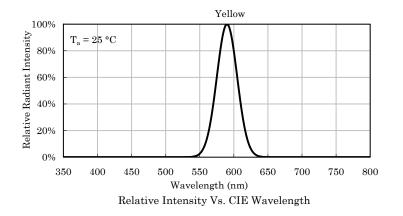
A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

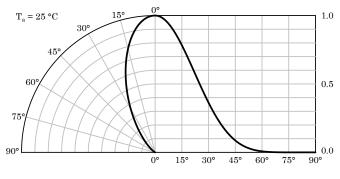
Operating Characteristics (T <sub>A</sub> =25°C)	Yellow (GaAsP/GaP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\rm F}$	1.95	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	2.4	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007*(Typ.) (I <sub>F</sub> =10mA)	λP	590*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I <sub>F</sub> =10mA)	λD	588*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$ riangle\lambda$	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	20	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =10mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLUY13D	Yellow	GaAsP/GaP	Yellow Diffused	<b>4*</b>	7*	590*	50°

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

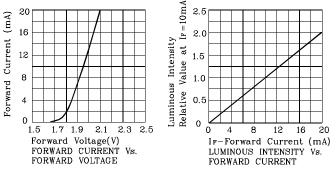






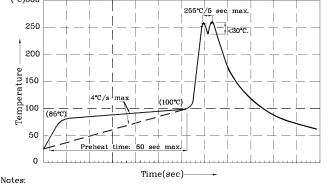
Spatial Distribution

### ♦ Yellow



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Wave Soldering Profile For Thru-Hole Products (Pb-Free Components) (°C)300



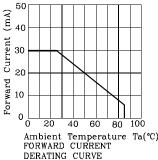
I.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of  $260^{\circ}$ C 2.Peak wave soldering temperature between  $245^{\circ}$ C ~  $255^{\circ}$ C for 3 sec

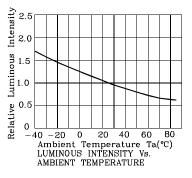
2.Peak wave soldering temperature between 245°C ~ 255°C for 3 sec (5 sec max).

3.Do not apply stress to the epoxy resin while the temperature is above 85°C. 4.Fixtures should not incur stress on the component when mounting and during soldering process.

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),

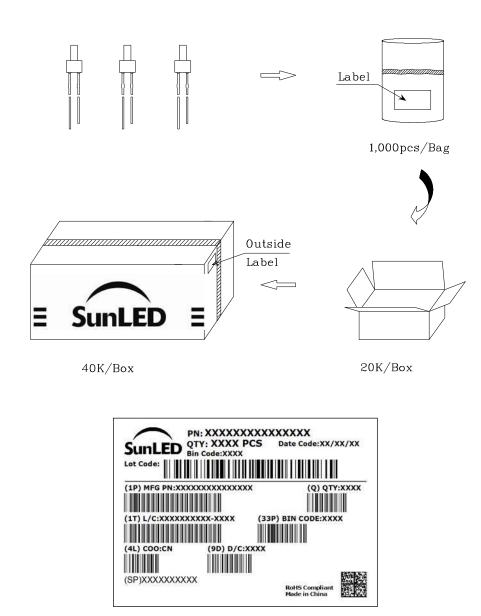
the typical accuracy of the sorting process is as follows:

- 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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