

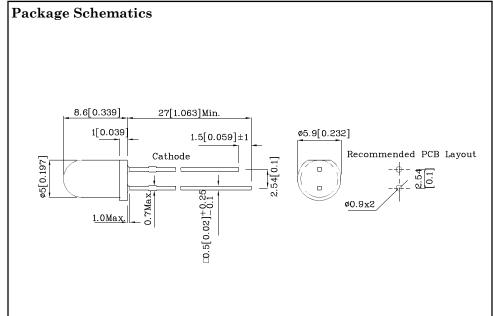
T-1 3/4 (5mm) SOLID STATE LAMP

## **Features**

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







#### 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 ( $T_A=25^{\circ}\mathrm{C}$ )		Yellow (GaAsP/GaP)	Unit		
Reverse Voltage	$V_{\mathrm{R}}$	5	V		
Forward Current	$I_{\mathrm{F}}$	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	140	mA		
Power Dissipation	$P_{D}$	75	mW		
Operating Temperature	$T_A$ -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				

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)	$V_{\mathrm{F}}$	1.95	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	2.4	V
Reverse Current (Max.) $(V_R=5V)$	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007*(Typ.) (I <sub>F</sub> =10mA)	λР	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)	$\triangle \lambda$	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	20	pF

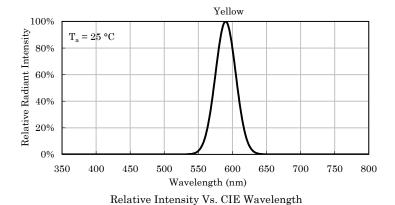
Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous Intensity} \\ \text{CIE127-2007*} \\ \text{(I_F=10mA)} \\ \text{mcd} \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLUY12D	Yellow	GaAsP/GaP	Yellow Diffused	10*	24*	590*	30°

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

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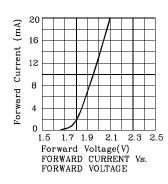


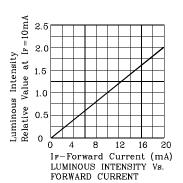


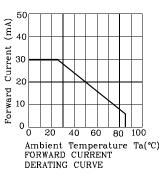
1.0  $T_a=25~^{\circ}\mathrm{C}$ 60 0.575 0.0 15° 45° 60° 75°

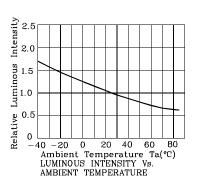
Spatial Distribution

## **❖** Yellow

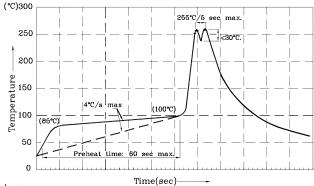








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



Notes: Notes. 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  $245^{\circ}C \sim 255^{\circ}C$  for 3 sec

(5 sec max).

3.Do not apply stress to the epoxy resin while the temperature is above  $85\,^\circ\text{C}.$  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%

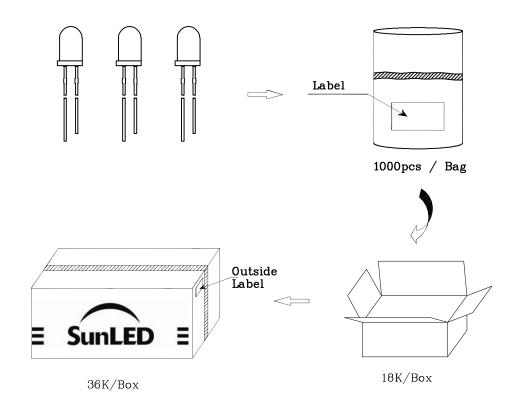
3. Forward Voltage: +/-0.1V

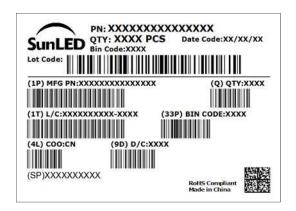
Note: Accuracy may depend on the sorting parameters.





### PACKING & LABEL SPECIFICATIONS





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