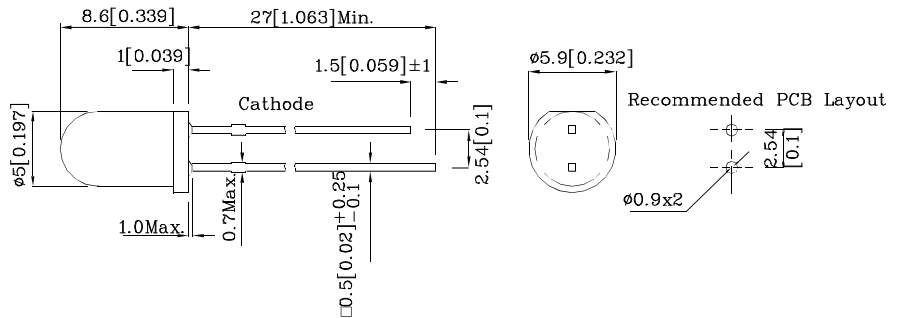


## Features

- Radial / Through hole package
- Reliable & robust
- Low power consumption
- Available on tape and reel
- 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.

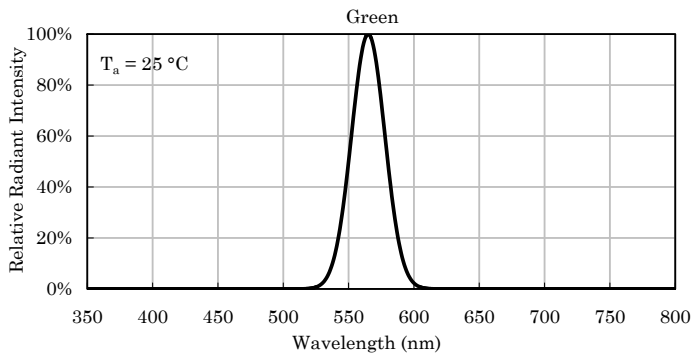
Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Green (GaP)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	25	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	140	mA
Power Dissipation	P <sub>D</sub>	62.5	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-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)

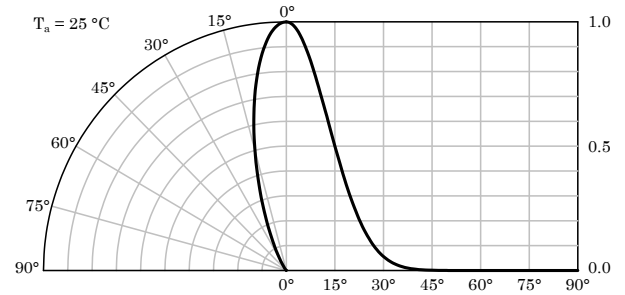
Operating Characteristics (T <sub>A</sub> =25°C)		Green (GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	V <sub>F</sub>	2	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	V <sub>F</sub>	2.4	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	10	uA
Wavelength of Peak Emission CIE127-2007*(Typ.) (I <sub>F</sub> =10mA)	λP	565*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I <sub>F</sub> =10mA)	λD	568*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	△λ	30	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (If=10mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 2θ 1/2
				min.	typ.		
XLUG12D	Green	GaP	Green Diffused	15*	29*	565*	30°

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

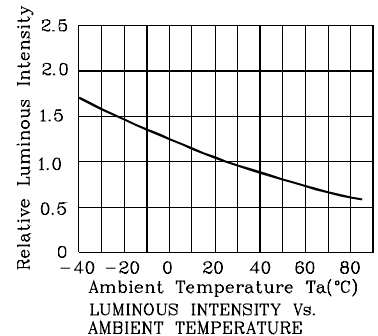
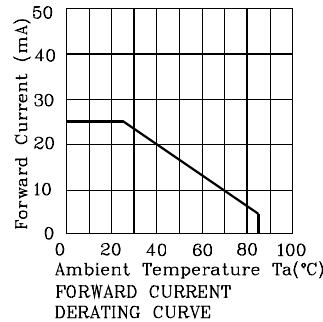
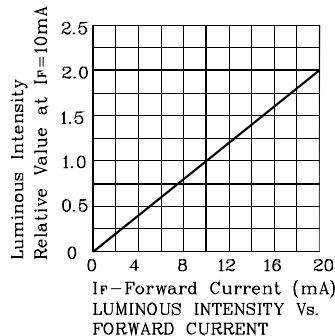
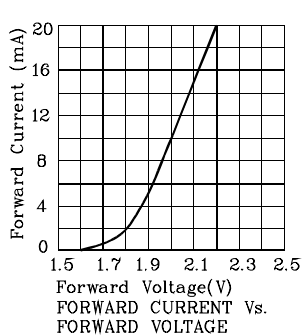


Relative Intensity Vs. CIE Wavelength

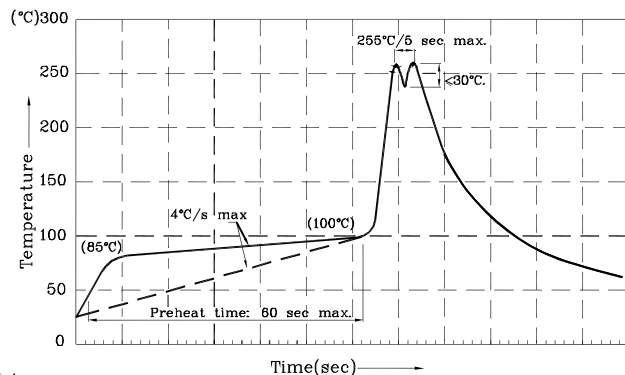


Spatial Distribution

## ◆ Green



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



### Notes:

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 280°C
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.
5. SAC 305 solder alloy is recommended.
6. No more than one wave soldering pass.

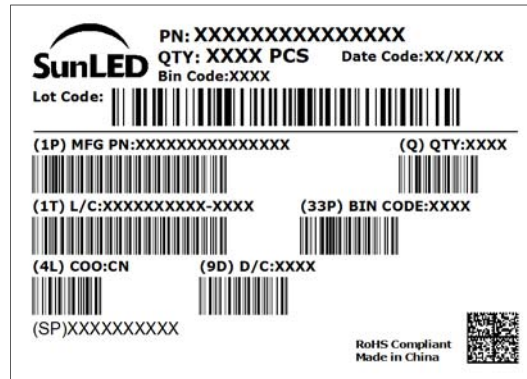
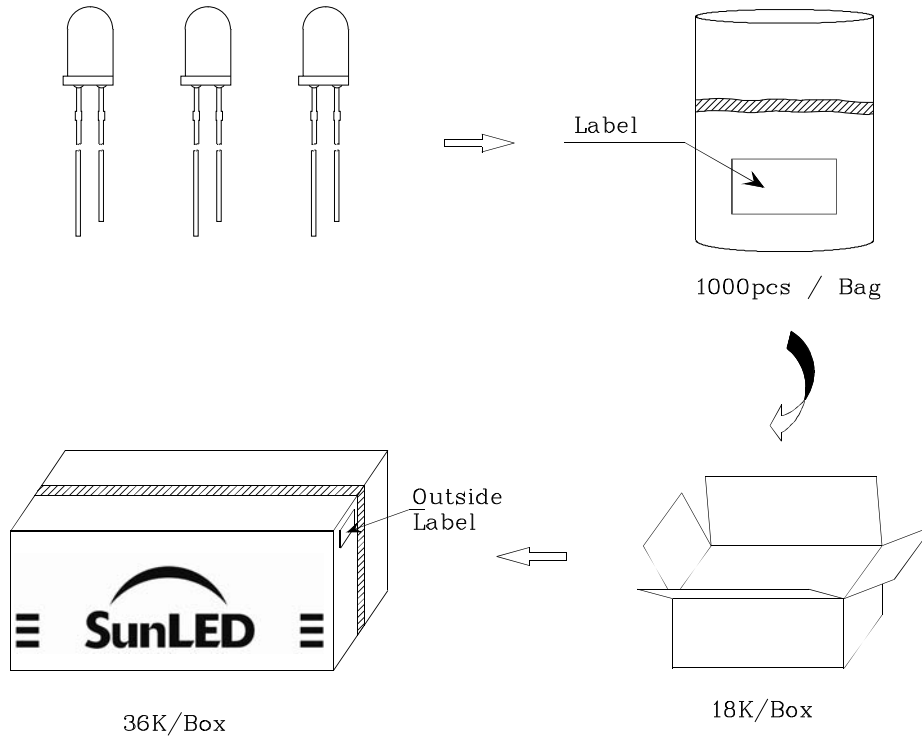
### Remarks:

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:  $\pm 1\text{nm}$
2. Luminous Intensity / Luminous Flux:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.

## PACKING & LABEL SPECIFICATIONS



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1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
2. Contents within this document are subject to improvement and enhancement changes without notice.
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