



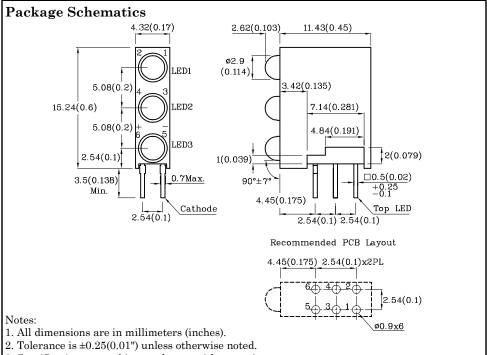
#### **Features**

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

Dec 07,2020







3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)	Green (GaP)	Unit		
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	140	mA	
Power Dissipation	$P_{D}$	62.5	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 ( $T_A=25$ °C)	Green (GaP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	$V_{\mathrm{F}}$ 2	
Forward Voltage (Max.) $V_F$ ( $I_F$ =10mA)		2.4	V
Reverse Current (Max.) $(V_R=5V)$	$I_R$	10	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λΡ	565*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=10\text{mA})$	λD	λD 568*	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$\triangle \lambda$	30	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	pF

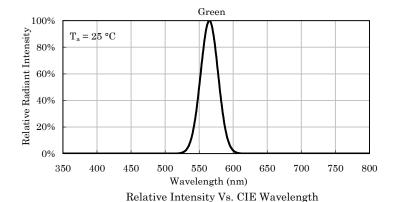
Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous Intensity} \\ \text{CIE127-2007*} \\ \text{(I}_{\text{F}}\text{=}10\text{mA)} \\ \text{mcd} \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XPZ3LUG11D	Green	GaP	Green Diffused	10*	24*	565*	50°

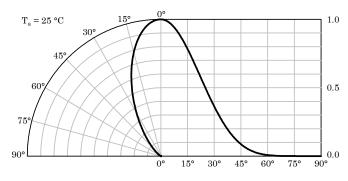
<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.





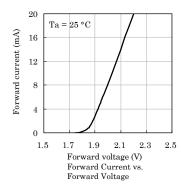


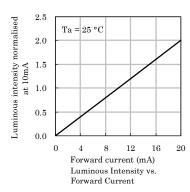


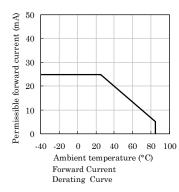


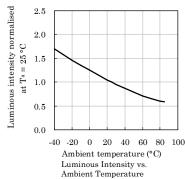
Spatial Distribution

# **❖** Green

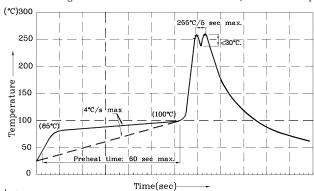








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



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 260°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  $85\,^\circ\text{C}.$  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%

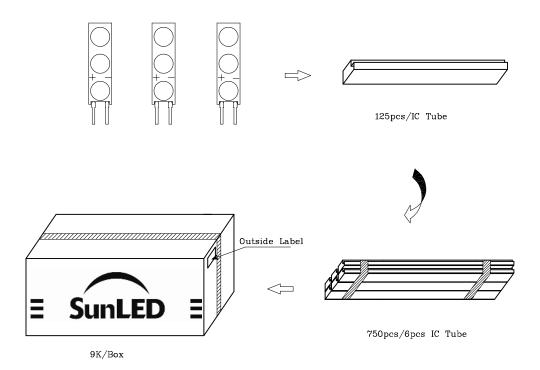
3. Forward Voltage: +/-0.1V

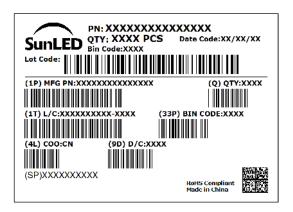
Note: Accuracy may depend on the sorting parameters.





## PACKING & LABEL SPECIFICATIONS





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Dec 07,2020 XDSB8831 V2-Z Layout: Maggie L.