

 $0.65 \times 0.35 \times 0.2$  mm SMD Chip LED Lamp



#### **Features**

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 4,000pcs/ Reel
- $\bullet$  MSL (Moisture Sensitivity Level): 2
- RoHS compliant

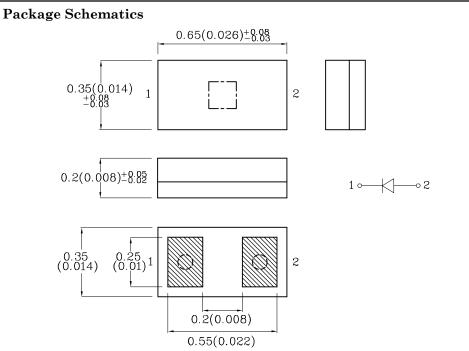






# ATTENTION

OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.1(0.004")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)	Blue (InGaN)	Unit		
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	5	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	25	mA	
Power Dissipation	PD	16	mW	
Electrostatic Discharge Threshold (HBM)	250	V		
Operating Temperature	$T_{A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	U	

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)	Blue (InGaN)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =5mA)	$V_{ m F}$	2.9	V
Forward Voltage (Max.) (I <sub>F</sub> =5mA)	$V_{\mathrm{F}}$	3.2	V
Reverse Current (Max.) $(V_R=5V)$	$I_{\mathrm{R}}$	50	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =5mA)	λΡ	463*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =5mA)	λD	468*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =5mA)	Δλ	25	nm

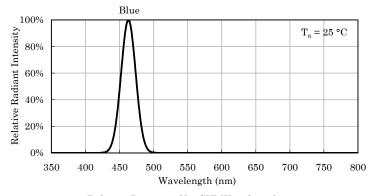
Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous} \\ \text{CIE127} \\ \text{(I}_{\text{F}} = 5 \\ \text{mod} \end{array}$	mA)	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZFBA155W5MAV	Blue	InGaN	Water Clear	30*	59*	463*	140°

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

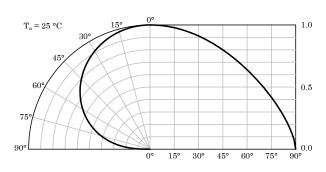
Dec 27,2018





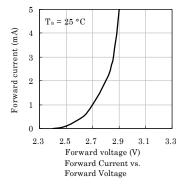


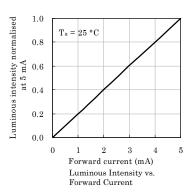
Relative Intensity Vs. CIE Wavelength

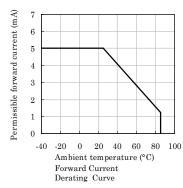


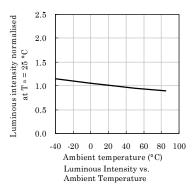
Spatial Distribution

#### **❖** Blue



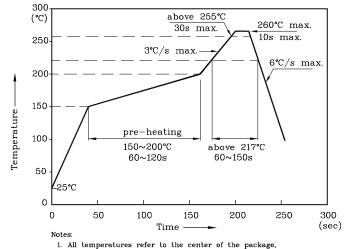






# LED is recommended for reflow soldering and soldering profile is shown below.

Reflow Soldering Profile for SMD Products (Pb-Free Components)



- measured on the package body surface facing up during reflow.

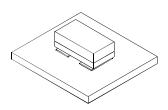
  2. Do not apply any stress to the LED during high temperature conditions.

  3. Maximum number of soldering passes: 2

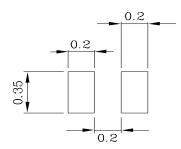




❖ The device has a single mounting surface. The device must be mounted according to the specifications.

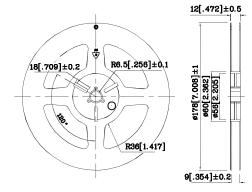


# **♦** Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

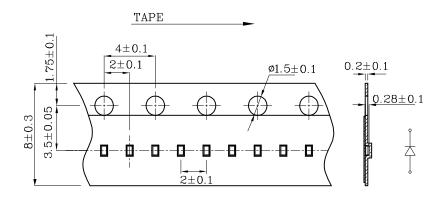


Mask open area ratio:80% Mask thickness:80~100um

## **❖** Reel Dimension



### **❖** Tape Specification (Units:mm)



# 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:

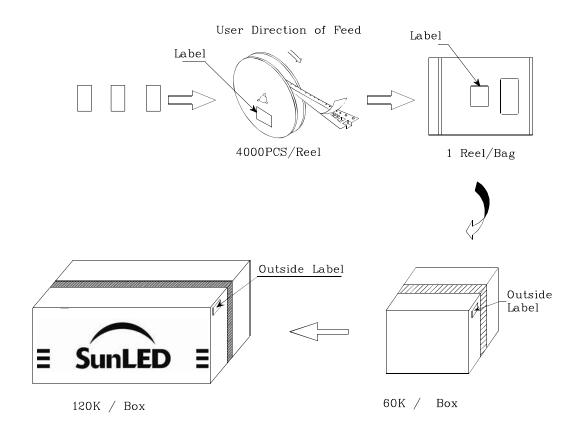
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

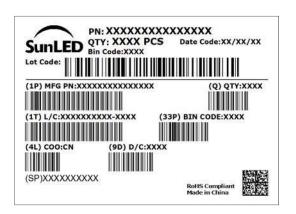
Note: Accuracy may depend on the sorting parameters.





#### PACKING & LABEL SPECIFICATIONS





#### TERMS OF USE

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