

## Part Number: XZMEKXVG161W-A

2.5 x 0.7 mm Right Angle SMD Chip LED Lamp

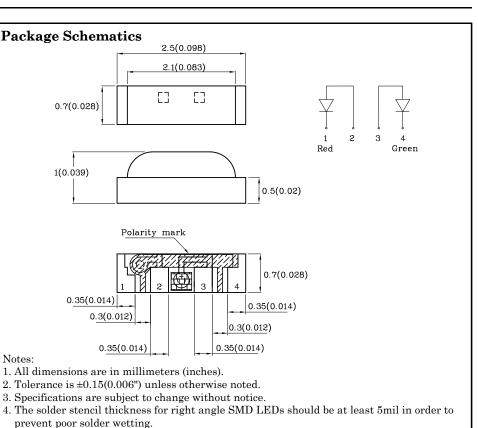
#### Features

- $\bullet$  2.5 x 0.7 x 1.0 mm right angle SMD LED
- Ideal for indication on hand held products
- Low current operation
- Standard Package: 3,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- Halogen-free
- $\bullet$  RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



Green Red **Absolute Maximum Ratings** (AlGaI (AlGaI Unit (T<sub>A</sub>=25°C) nP) nP) **Reverse Voltage** VR  $\mathbf{5}$  $\mathbf{5}$ V Forward Current 30 30  $\mathbf{I}_{\mathrm{F}}$ mА Forward Current (Peak) 1/10 Duty Cycle  $i_{\rm FS}$ 195150mА 0.1ms Pulse Width Power Dissipation  $\mathbf{P}_{\mathrm{D}}$ 7575mW **Operating Temperature**  $T_{\rm A}$  $-40 \sim +85$ °C Storage Temperature Tstg

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)		Red (AlGaI nP)	Green (AlGaI nP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2.0	2.1	V
Forward Voltage (Max.) ( $I_F$ =20mA)	$V_{\rm F}$	2.5	2.5	V
Reverse Current (Max.) ( $V_R$ =5V)	$I_{R}$	10	10	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λP	630*	574*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	621*	570*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	20	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	25	15	pF
Luminous Intensity		Waveleng	th w	

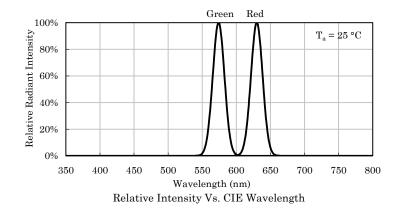
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZMEKXVG161W-A –	Red	AlGaInP	- Water Clear	80 20*	108 39*	630*	130°
	Green	AlGaInP		20 20*	44 44*	574*	

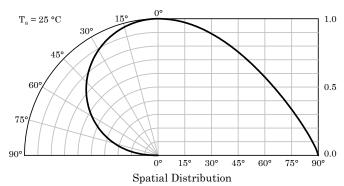
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

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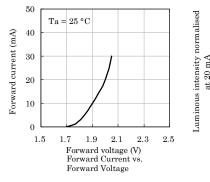
XDSB9581 V1-X Layout: Maggie L.

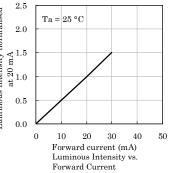


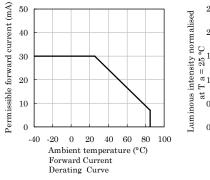


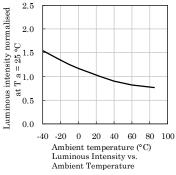


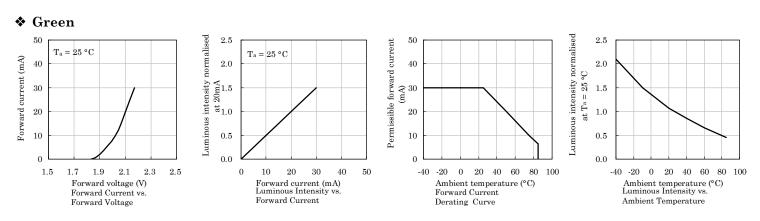
\* Red











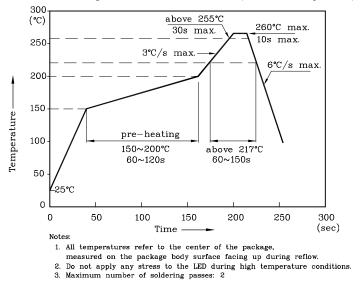
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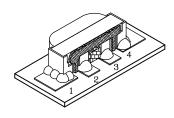


# **\*** LED is recommended for reflow soldering and soldering profile is shown below.

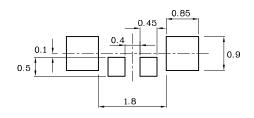
Reflow Soldering Profile for SMD Products (Pb-Free Components)



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

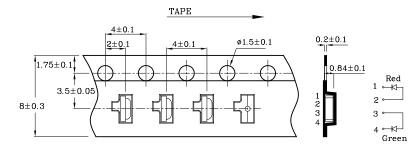


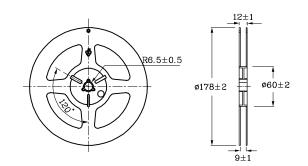
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



### Tape Specification (Units : mm)

Reel Dimension (Units : mm)





#### Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength),

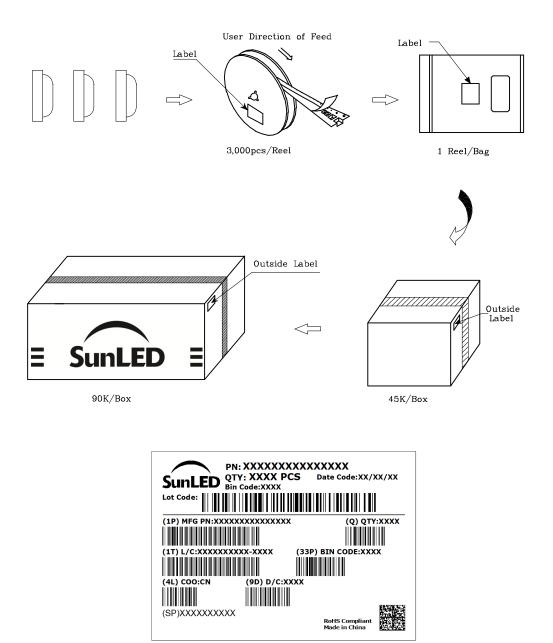
the typical accuracy of the sorting process is as follows:

- 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**



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