

3.2 x 2.4mm SMD Chip LED Lamp

## Features

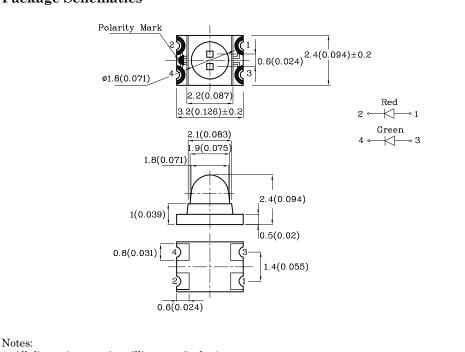
- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 1,500pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- Halogen-free
- RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES





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)		Red (AlGaInP)	Green (AlGaInP)	Unit
Reverse Voltage	$V_{\mathrm{R}}$	5	5	V
Forward Current	$\mathrm{I}_\mathrm{F}$	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	185	150	mA
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	75	75	mW
Operating Temperature	TA	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		C

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 (AlGaInP)	Green (AlGaInP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	1.95	2.1	v
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2.5	2.5	v
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub> 10		10	μΑ
Wavelength of Peak Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λP	645*	574*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λD	630*	570*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle \lambda$	28	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	35	15	pF
Lens-color Lens-color		Wavelength CIE127-2007* Viewing Angle		

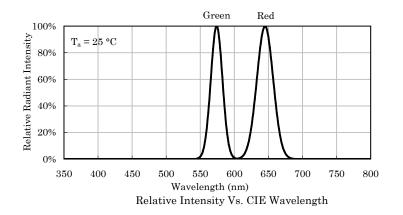
Part Number	Emitting Color	Emitting Material	Lens-color	CIE127-2007* (I <sub>F</sub> =20mA) mcd		CIE127-2007* nm λP	Angle 20 1/2
				min.	typ.		
Red XZMDKVG78W Green	Red	AlGaInP	Water Clear	700 120*	1295 397*	645*	20°
	Green	AlGaInP		80 80*	278 278*	574*	

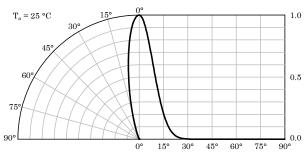
\*Intensity intensity value and wavelength are in accordance with CIE127-2007 standards.

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XDSB0526 V8-X Layout: Maggie L.

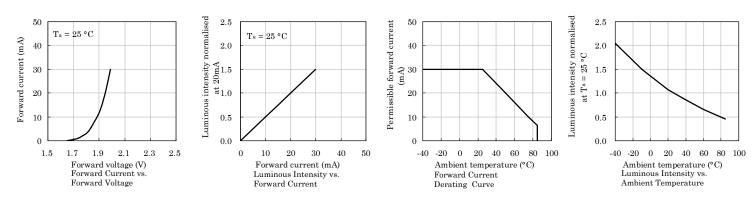




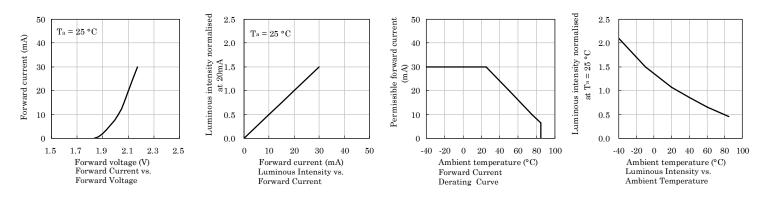


Spatial Distribution





Green

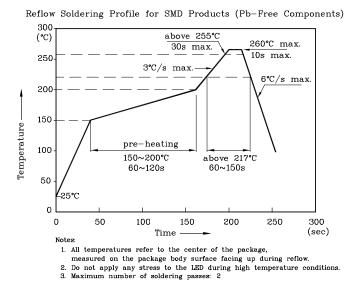


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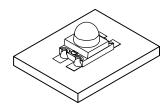
XDSB0526 V8-X Layout: Maggie L.



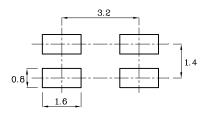
# LED is recommended for reflow soldering and soldering profile is shown below.



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



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



Reel Dimension (Units : mm)

# Tape Specification (Units : mm)

#### TAPE 12 + 124±0.1 2±0.1 ø1.5±0.1 $0.23 \pm 0.1$ $4 \pm 0.1$ R6.5±0.5 $1.75 \pm 0.1$ ø60±2 ø178±2 $2.55 \pm 0.1$ 8±0.3 太 Å $3.5 \pm 0.05$ З 9±1

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%

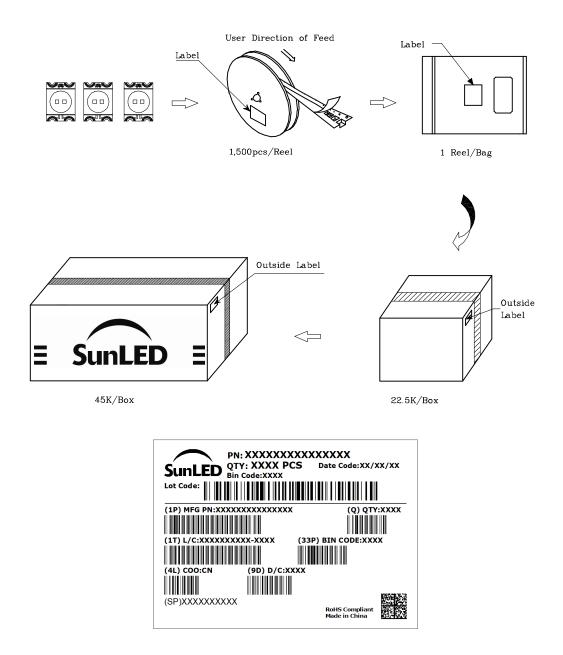
3. Forward Voltage: +/-0.1V  $\,$ 

Note: Accuracy may depend on the sorting parameters.

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## PACKING & LABEL SPECIFICATIONS



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