

## Part Number: XZM2MRTNI55W-8

3.2x1.6mm SMD CHIP LED LAMP

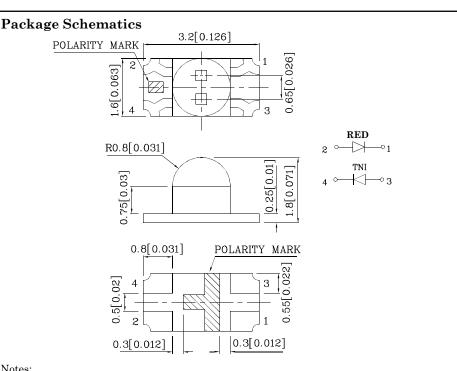
### Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



Notes: 1. All dimensions are in millimeters (inches).

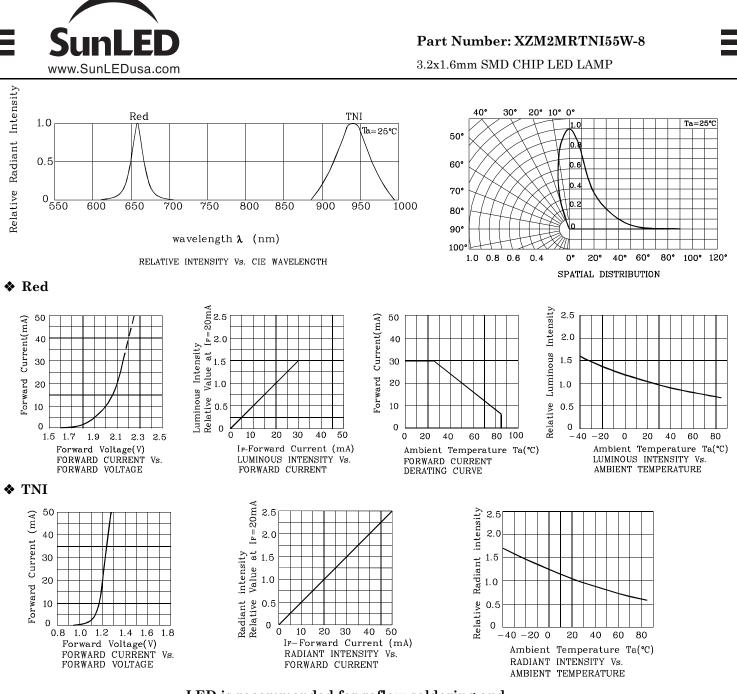
2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.

3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Red (AlGaInP)	TNI (GaAs)	Unit		Operating Characteristics (T <sub>A</sub> =25°C)			Red (AlGaInP)	TNI (GaAs)	Unit
Reverse Voltage	VR	5	5	V		Forward Voltage	(Typ.)	$V_{\rm F}$	2.1	1.2	V
Forward Current	$I_{\rm F}$	30	50	mA		(I <sub>F</sub> =20mA)					
Forward Current (Peak) 1/10 Duty Cycle		150	1200	mA		Forward Voltage (I <sub>F</sub> =20mA)	(Max.)	$V_{\rm F}$	2.5	1.6	V
0.1ms Pulse Width	ifs	100				Reverse Current (Max.)		$I_R$	10	10	uA
Power Dissipation	PD	75	80	mW		(V <sub>R</sub> =5V)		-11			
Operating Temperature T <sub>A</sub>		-40 ~	-40 ~ +85			Wavelength of Peak Emission CIE127-2007* (Typ.)		λP	660*	940*	nm
Storage Temperature	Tst	g -40 ~	+85	°C		(I <sub>F</sub> =20mA)					
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) Wavelength of Dominant [IF=20mA]							λD	640*	-	nm	
						Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)			20	50	nm
						Capacitance (Typ (V <sub>F</sub> =0V, f=1MHz)	.)	С	45	90	pF
Part Number	Emitting Color	Emitting Material	Lens-colo	(		adiant IntensityLuminous InCIE127-2007*CIE127-20(Po =mW/sr)(IF=20m@20mAmcd		2007* nA)	Wavelength Viewing CIE127-2007* Angle nm λ P 2 θ 1/2		ngle
					m	in. typ.	min.	typ.			
XZM2MRTNI55W-8	Red	AlGaInP	Water Cle				500 120*	1295 397*	660*		200
	-	GaAs	water Cle	ear —		.2 2.3 .8* 1.3*	-	-	940*		30°

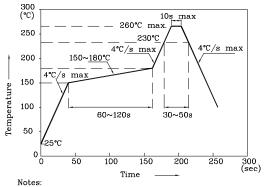
\*Luminous/radiant intensity value and wavelength are in accordance with CIE127-2007 standards. Feb 22,2017

XDSB8904 V1-X Layout: Maggie L.



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

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



Maximum soldering temperature should not exceed 260°C Recommended reflow temperature: 245°C-260°C 2.

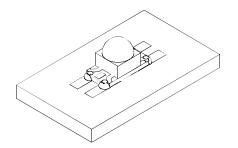
З. Do not put stress to the epoxy resin during

high temperatures conditions

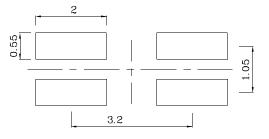


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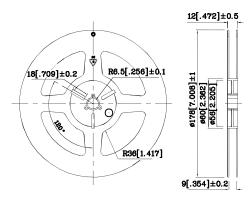
The device has a single mounting surface. The device must be mounted according to the specifications.



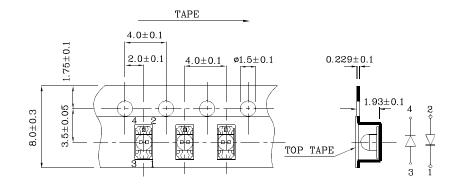
## Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



# 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%

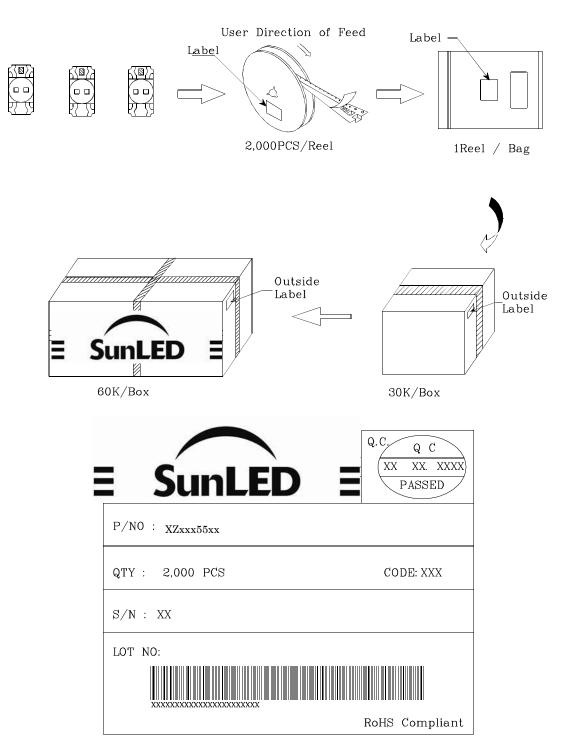
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



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# **PACKING & LABEL SPECIFICATIONS**



#### TERMS OF USE

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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet.
- User accepts full risk and responsibility when operating the product(s) beyond their intended specifications. 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please
  - consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
- 5. The contents within this document may not be altered without prior consent by SunLED.
- $6. \ Additional \ technical \ notes \ are \ available \ at \ \underline{http://www.SunLEDusa.com/TechnicalNotes.asp}$

Feb 22,2017

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