

3.2mmx1.6mm SMD CHIP LED LAMP

Features

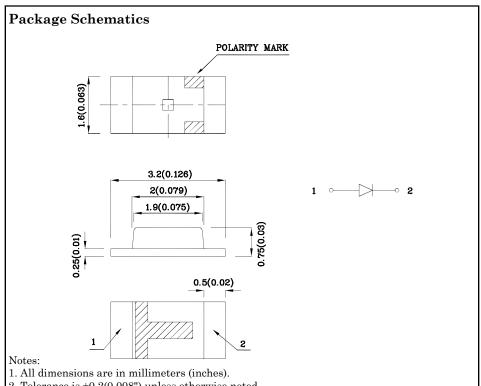
- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- \bullet MSL (Moisture Sensitivity Level): 3
- RoHS compliant







ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



- 2. Tolerance is $\pm 0.2(0.008")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)	CWD (InGaN)	Unit			
Reverse Voltage	V_{R}	5	V		
Forward Current	I_{F}	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	150	mA		
Power Dissipation	P_{D}	120	mW		
Electrostatic Discharge Threshold (F	250	V			
Operating Temperature	T_{A}	-40 ~ +85	°C		
Storage Temperature	Tstg	-40 ~ +85			

Operating Characteristics (T _A =25°C)		CWD (InGaN)	Unit
Forward Voltage (Typ.) (I _F =20mA)	$ m V_{F}$	3.3	V
Forward Voltage (Max.) (I _F =20mA)	$ m V_{F}$	4	V
Reverse Current (Max.) (V _R =5V)	${ m I}_{ m R}$	50	uA
Chromaticity Coordinates	x	0.31	
(Typ.)	у	0.31	
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	100	pF

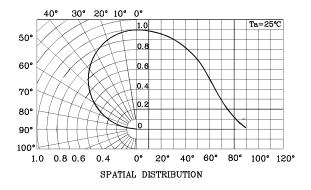
 Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous Intensity} \\ \text{CIE}127\text{-}2007* \\ \text{(I}_{\text{F}}\text{=}20\text{mA)} \\ \text{mcd} \end{array}$		Viewing Angle 20 1/2
				min.	typ.	
XZCWD55F-1	White	InGaN	Yellow Fluorescent	120*	248*	120°

^{*}Luminous intensity value is in accordance with CIE127-2007 standards.

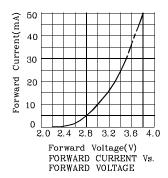
Feb 14,2014 XDSB2243 V5-Z Layout: Maggie L.

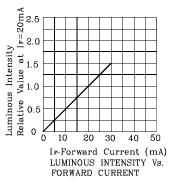


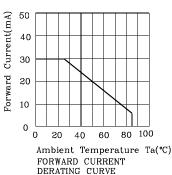


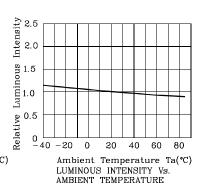


& CWD



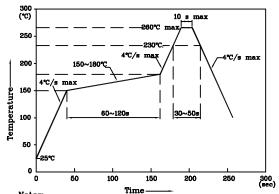






LED is recommended for reflow soldering and soldering profile is shown below.

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



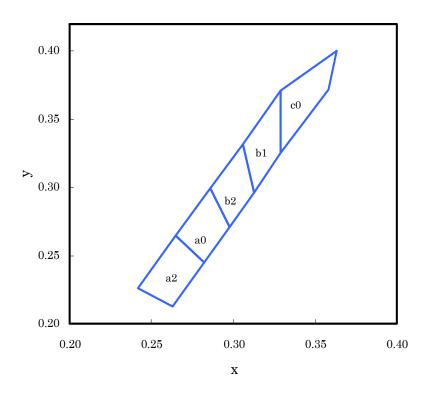
- notes:
 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions





XZCWD55F-1

White CIE



	X	У		X	у		X	У
	0.263	0.213	a0	0.282	0.245	b2	0.298	0.271
a2	0.282	0.245		0.298	0.271		0.313	0.296
az	0.265	0.265		0.286	0.299		0.306	0.332
	0.242	0.226		0.265	0.265		0.286	0.299
	0.313	0.296	c0	0.329	0.325			
b1	0.329	0.325		0.358	0.372			
01	0.329	0.371		0.363	0.400			
	0.306	0.332		0.329	0.371			

Notes:

Shipment may contain more than one chromaticity regions. Orders for single chromaticity region are generally not accepted. Measurement tolerance of the chromaticity coordinates is $\pm 0.01.$

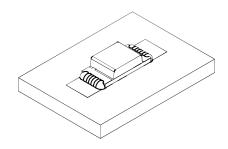




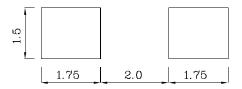
3.2mmx1.6mm SMD CHIP LED LAMP

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

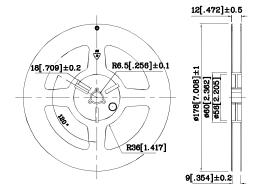
www.SunLEDusa.com



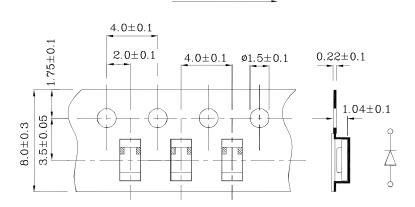
♦ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ Reel Dimension



❖ Tape Specification (Units:mm)



TAPE

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or chromaticity), the typical accuracy of the sorting process is as follows:

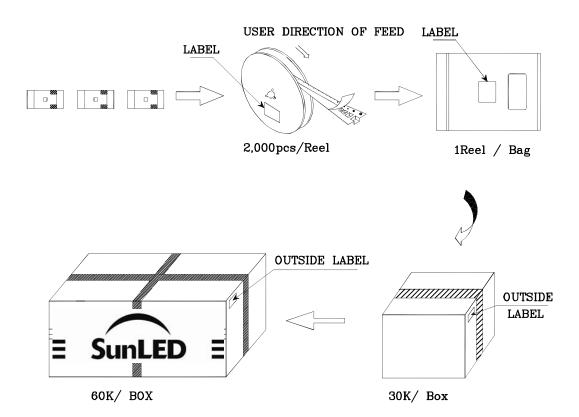
- 1. Measurement tolerance of the chromaticity coordinates is ± 0.01 .
- 2. Luminous Intensity/ Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

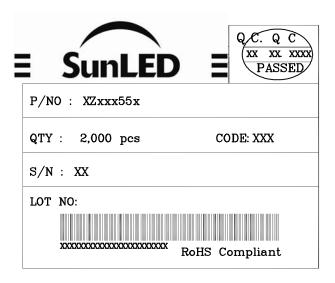
Note: Accuracy may depend on the sorting parameters.





PACKING & LABEL SPECIFICATIONS





TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- $2. \ Contents \ within \ this \ document \ are \ subject \ to \ improvement \ and \ enhancement \ changes \ without \ notice.$
- 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 http://www.SunLEDusa.com/TechnicalNotes.asp

Feb 14,2014