

Part Number: XZFWS56F

3.0mmx1.0 mm RIGHT ANGLE 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



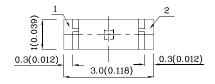


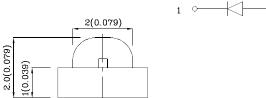


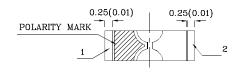
ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE

DEVICES

Package Schematics







Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.15(0.006")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Rating (TA=25°C)	FWS (InGaN)	Unit		
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Current	I_{F}	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	100	mA	
Power Dissipation	PD	120	mW	
Operating Temperature	TA	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Thres. (HBM)	250	V		

Operating Characteristics (TA=25°C)	FWS (InGaN)	Unit	
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	3.3	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	4	V
Reverse Current (Max.) (V _R =5V)	I_{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	$\begin{array}{c} \text{Luminous Intensity} \\ \text{CIE127-2007*} \\ \text{(I}_{\text{F}}\text{=}20\text{mA}) \\ \text{mcd} \end{array}$		Viewing Angle 20 1/2
				min.	typ.	
XZFWS56F	White	InGaN	Yellow Fluorescent	300*	447*	120°

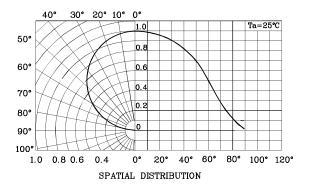
^{*}Luminous intensity value is in accordance with CIE127-2007 standards.

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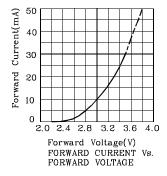


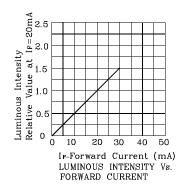
CHIP LED LAMP

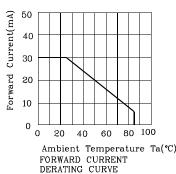


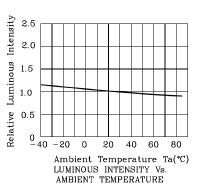


FWS



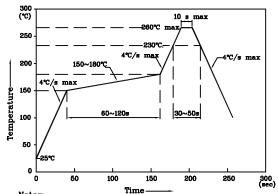






LED is recommended for reflow soldering and soldering profile is shown below.

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



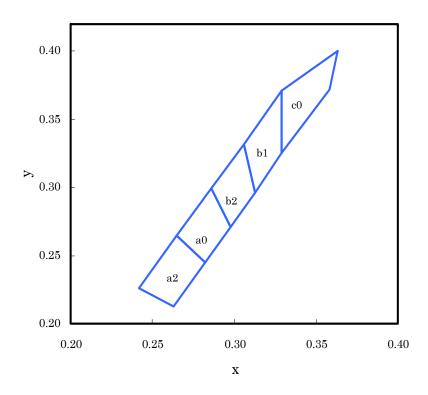
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- Do not put stress to the epoxy resin during high temperatures conditions



 $3.0 \, \mathrm{mmx} \, 1.0 \, \, \mathrm{mm}$ RIGHT ANGLE SMD CHIP LED LAMP

XZFWS56F

White CIE



	X	У		x	У		X	у
	0.263	0.213	a0	0.282	0.245		0.298	0.271
a2		0.245		0.298	0.271	b2	0.313	0.296
az	0.265	0.265		0.286	0.299	02	0.306	0.332
	0.242	0.226		0.265	0.265		0.286	0.299
b1	0.313	0.296	с0	0.329	0.325			
	0.329	0.325		0.358	0.372			
	0.329	0.371		0.363	0.400			
	0.306	0.332		0.329	0.371			

Notes

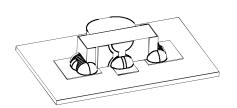
Shipment may contain more than one chromaticity regions. Orders for single chromaticity region are generally not accepted. Measurement tolerance of the chromaticity coordinates is ± 0.01 .

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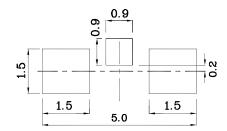
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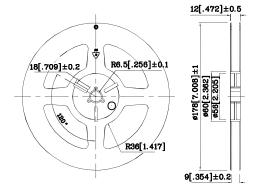
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



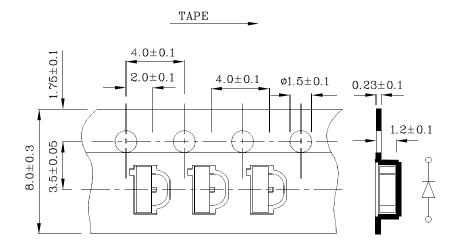
♦ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ Reel Dimension



❖ Tape Specification (Units:mm)



Remarks:

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

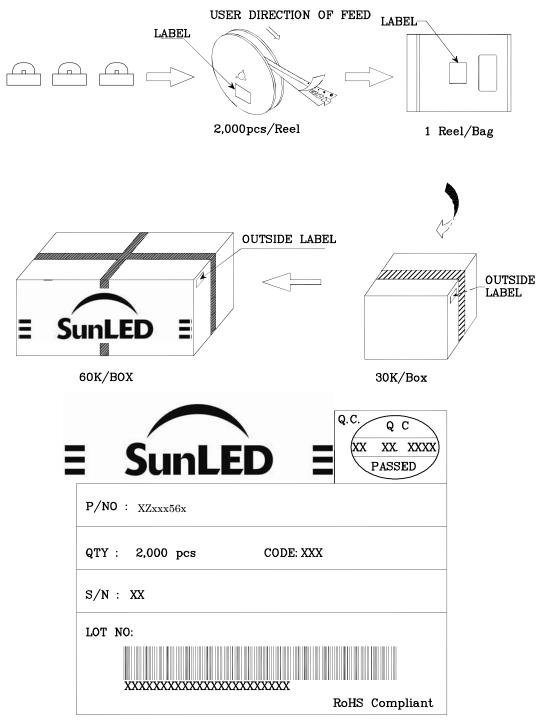
- 1. Measurement tolerance of the chromaticity coordinates is ± 0.01 .
- 2. Luminous Intensity/ Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



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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