SunLED
www.SunLEDusa.com

Part Number: XSFWCB983W

SUPER FLUX LED LAMP

Features

- High current operation for greater luminous output
- Low power consumption and thermal resistance
- Can be used with automatic insertion equipment
- RoHS Compliant

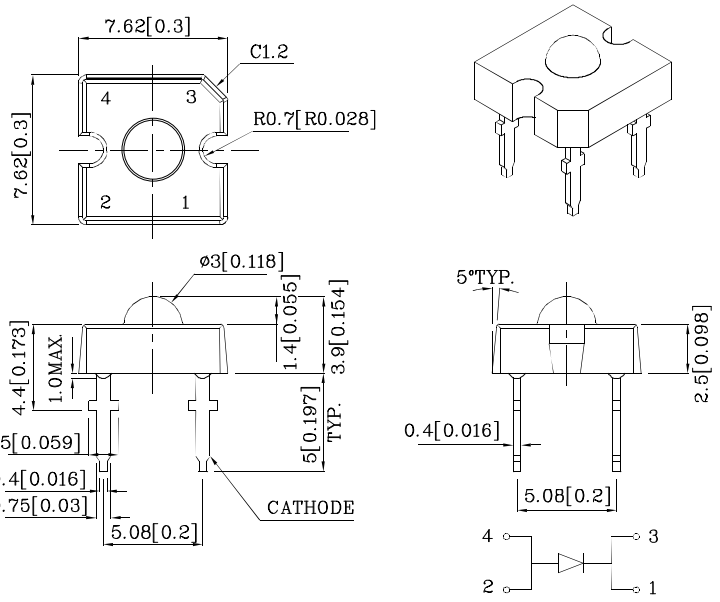
Benefits:

- Rugged design allows for easy maintenance
- Robust package for optimum reliability

Typical Applications:

- Automotive side markers
- Gaming and entertainment lighting
- Signs and road hazard indicators

Package Schematics



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

ATTENTION
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

Absolute Maximum Ratings (T_A=25°C)		**FWCB (InGaN)**	**Unit**
Reverse Voltage	V_R	5	V
DC Forward Current	I_F	30	mA
Power Dissipation	P_D	126	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	Tstg	-55 ~ +85	
Electrostatic Discharge Threshold (HBM)		250	V
Lead Solder Temperature [1.5mm Below Seating Plane.][1]		260°C For 5 Seconds	

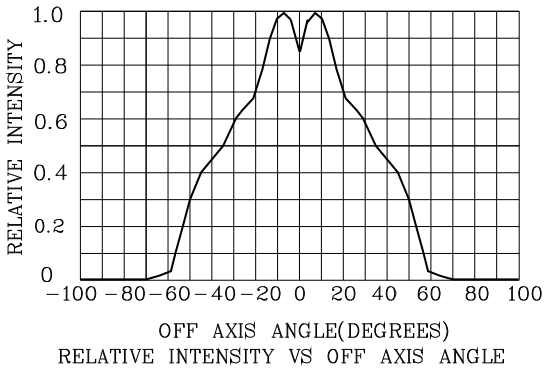
1.No Reflow soldering .

Operating Characteristics (T_A=25°C)		**FWCB (InGaN)**	**Unit**
Forward Voltage (Typ.) (I_F=30mA)	V_F	3.5	V
Forward Voltage (Max.) (I_F=30mA)	V_F	4.2	V
Reverse Current (Max.) (V_R=5V)	I_R	50	uA
Chromaticity Coordinates (Typ.)	x	0.31	
	y	0.31	
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	100	pF
Thermal Resistance (Typ.)	Rθj-pin	180	°C/W

1.The dominant wavelength is derived from the CIE Chromaticity Diagram and represents the perceived color of the device.

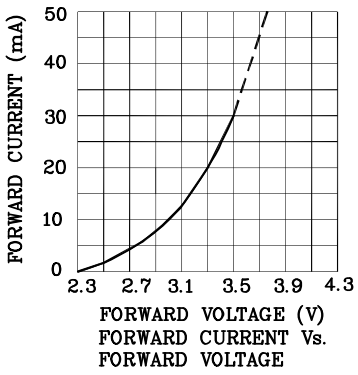
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I_F=30mA) cd		Viewing Angle 2θ 1/2
				min.	typ.	
XSFWCB983W	White	InGaN	Water Clear	3.6	5.19	70°

1.Luminous intensity is measured with an integrating sphere after the device has stabilized.
2.θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.

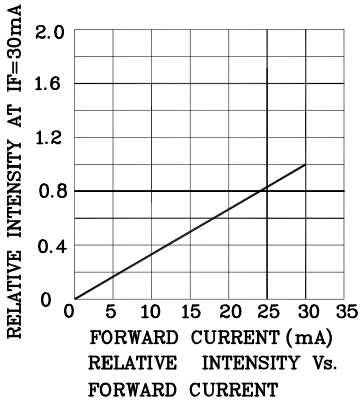


RELATIVE INTENSITY VS OFF AXIS ANGLE

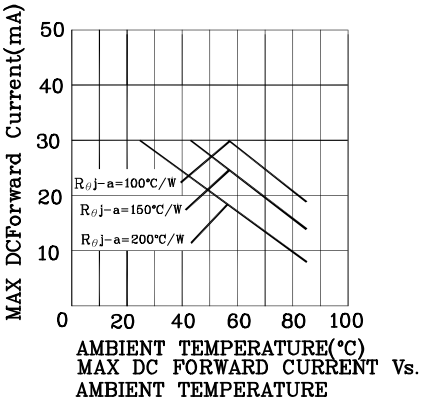
❖ FWCB



FORWARD CURRENT Vs.
FORWARD VOLTAGE

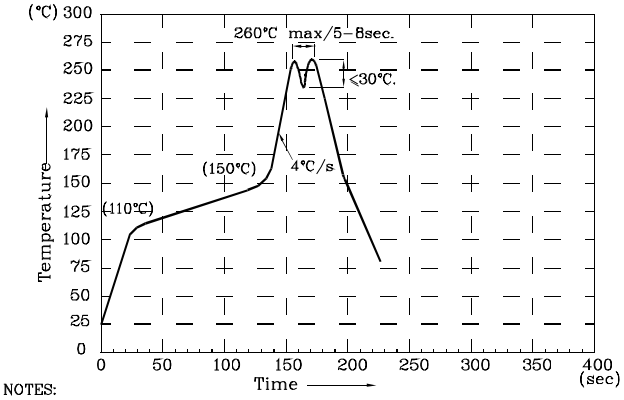


RELATIVE INTENSITY Vs.
FORWARD CURRENT



MAX DC FORWARD CURRENT Vs.
AMBIENT TEMPERATURE

Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



NOTES:
1. Recommend the wave temperature 245°C~260°C. The maximum soldering temperature should be less than 260°C.
2. Do not apply stress on epoxy resins when temperature is over 85°C.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. During wave soldering, the PCB top-surface temperature should be kept below 105°C.
5. No more than once.

Remarks:

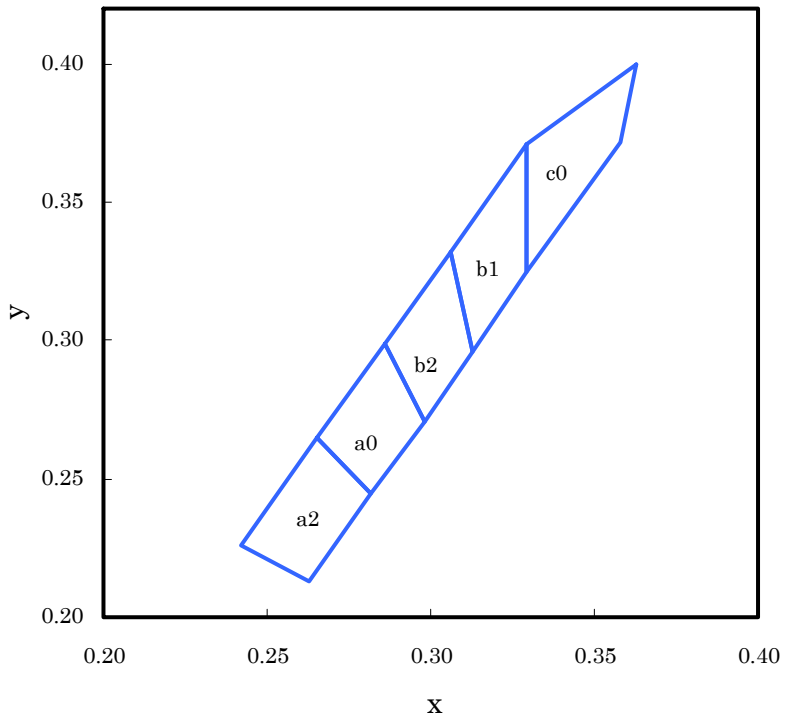
If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or chromaticity), the typical accuracy of the sorting process is as follows:

1. Measurement tolerance of the chromaticity coordinates is ±0.02.
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

XSFWCB983W

White CIE



	x	y		x	y		x	y
a2	0.263	0.213	a0	0.282	0.245	b2	0.298	0.271
	0.282	0.245		0.298	0.271		0.313	0.296
	0.265	0.265		0.286	0.299		0.306	0.332
	0.242	0.226		0.265	0.265		0.286	0.299
b1	0.313	0.296	c0	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 ±0.02.

PACKING & LABEL SPECIFICATIONS