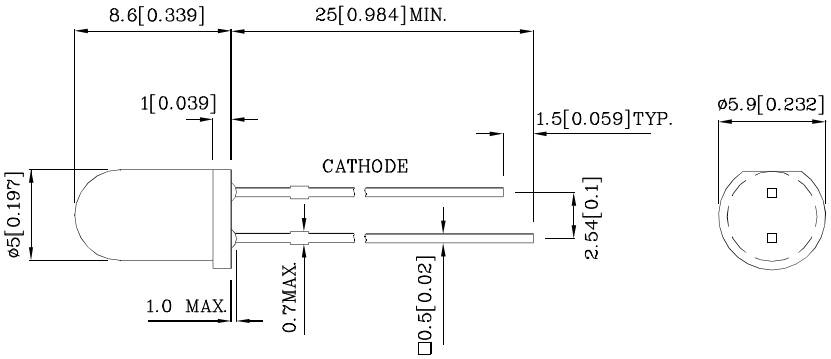
SunLED
www.SunLEDusa.com

Part Number: **XLFBB14W**

T-1 3/4 (5mm) ROUND LED LAMP

Features

- Outstanding material efficiency.
- Reliable and rugged.
- Low current capability.
- RoHS compliant.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

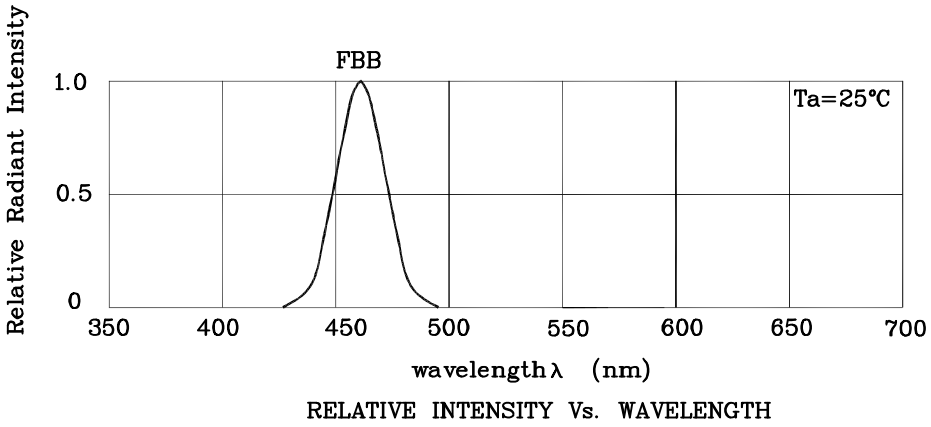
Notes:

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.

Absolute Maximum Ratings (TA=25°C)		**FBB (InGaN)**	**Unit**
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	100	mA
Power Dissipation	PD	120	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds		
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds		

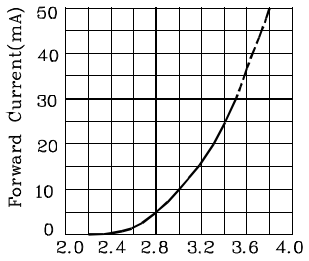
Operating Characteristics (TA=25°C)		**FBB (InGaN)**	**Unit**
Forward Voltage (Typ.) (IF=20mA)	VF	3.3	V
Forward Voltage (Max.) (IF=20mA)	VF	4.0	V
Reverse Current (Max.) (VR=5V)	IR	50	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λ P	465	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λ D	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	22	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XLFBB14W	Blue	InGaN	Water Clear	1200	2290	465	30°

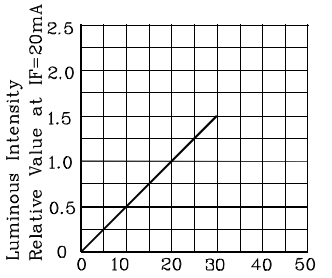


RELATIVE INTENSITY Vs. WAVELENGTH

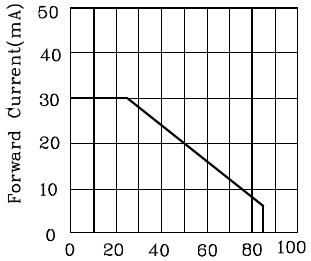
❖ **FBB**



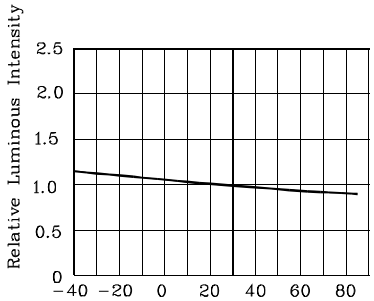
FORWARD CURRENT Vs.
FORWARD VOLTAGE



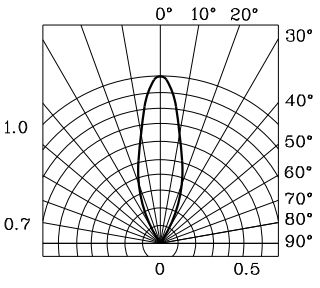
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE

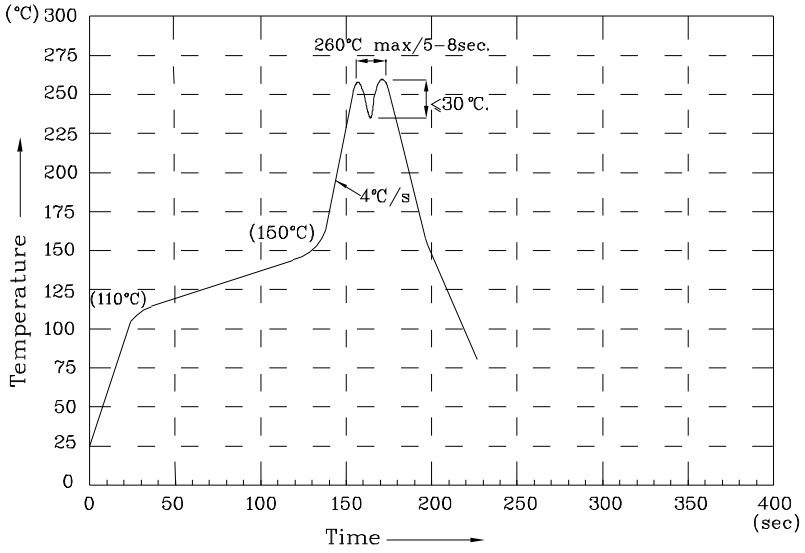


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

1. Recommend the wave temperature 245℃~260℃. The maximum soldering temperature should be less than 260℃.
2. Do not apply stress on epoxy resins when temperature is over 85 degree℃.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. No more than once.

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.

PACKING & LABEL SPECIFICATIONS XLFBB14W