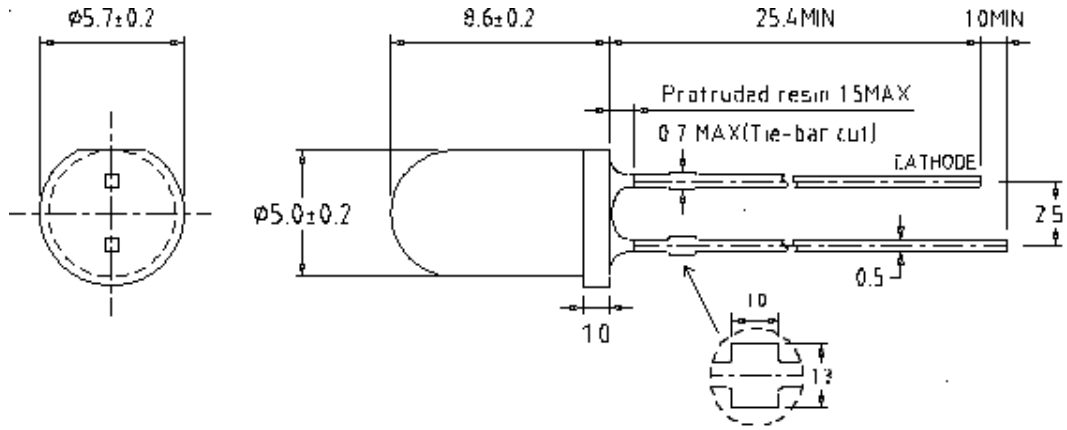
High Brightness UV LED Lamp

5mm Through-Hole Package

BL–LUUV5N38C series

FEATURES	APPLICATIONS
• High Output Ultraviolet (UV-A) LED • GaN on Sapphire die. • 5mm round resin mold. • Water Clear Lens. • Wide viewing angle.	• Epoxy Curing • Currency validation / detection • Bacteria detection. • Medical and forensics. • Decorative /Accent Lighting

PACKAGE OUTLINE DIMENSIONS:

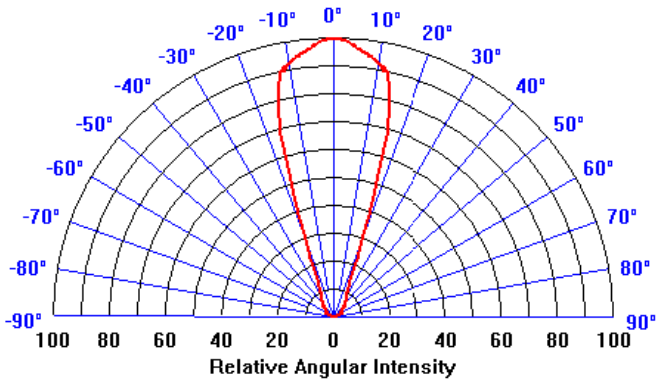


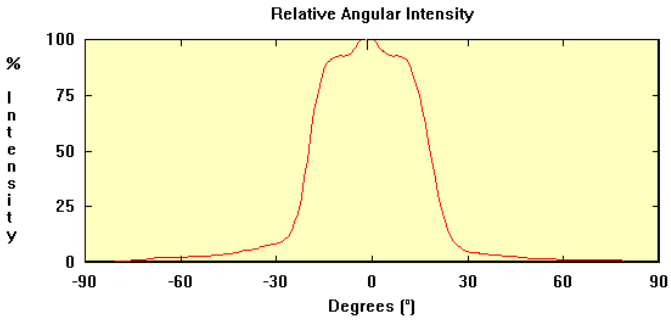
Lead Stoppers Optional

NOTES:

1. All dimensions are in millimeters.
2. Tolerance is ±0.25 mm unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

BEAM RADIATION PATTERN





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ABSOLUTE MAXIMUN RATING (at T_A = 25°C)

Parameter	Symbol	Value	Unit
Continuous Forward Current	I_F	30	mA
Peak Forward Current (1/10 Duty Cycle, 0.1msec Pulse width)	I_{Fp}	100	mA
Power Dissipation	P_d	100	mW
Forward Voltage	V_f	3.3	V
Reverse Voltage	V_R	5.0	V
Operating Temperature	T_{opr}	-40 to +85	°C
Storage Temperature	T_{stg}	-45 to +100	°C
Lead Soldering Temperature (1.6mm (0.063") from body)	**260°C for 5 seconds**		

ELECTRICAL / OPTICAL CHARACTERISTICS (at T_A = 25°C)

Parameter		Symbol	Min	Typ	Max	Unit
Forward Voltage	I_F= 20 mA	V_F		3.1	3.3	V
Total Radiant Flux	I_F= 20 mA	P	4	8		mW
Radiant Intensity (on optical axis)	I_F= 20 mA	I_r		10		mW/sr
Peak Wavelength	I_F= 20 mA	λ_p	398	403	410	nm
Spectrum Radiation Bandwidth	I_F= 20 mA	$\Delta\lambda$		19		nm
Viewing Angle		2θ 1/2	36	38	40	deg
Reverse Current	V_R= 5 V	I_R		10	100	μA

Operating Warning Notes:

This device radiates intense Ultra Violet (UV) light when operated. Most of the UV radiation is not visible. Exposure to UV can be harmful to your health.
Proper eye and skin protection is recommended. Do not look directly at the device during operation. Even brief exposure can produce eye damage.

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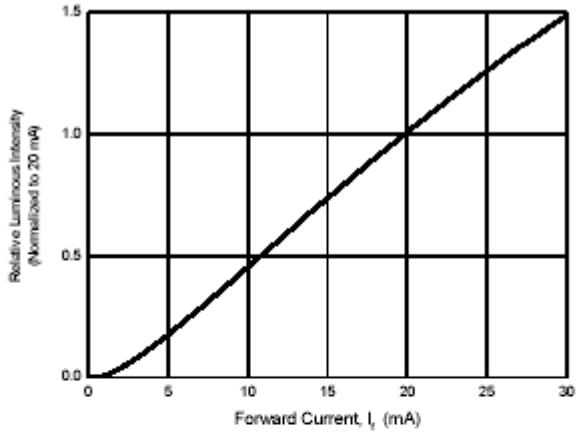
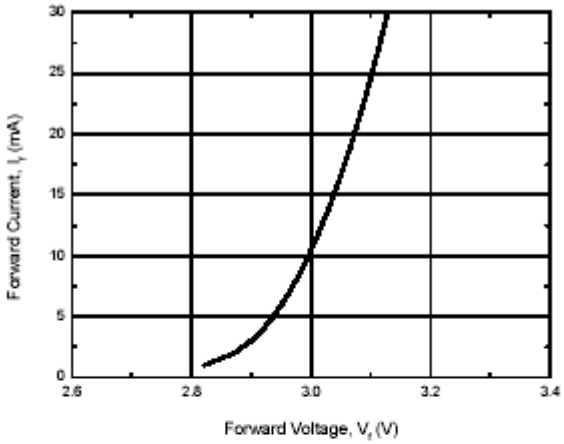
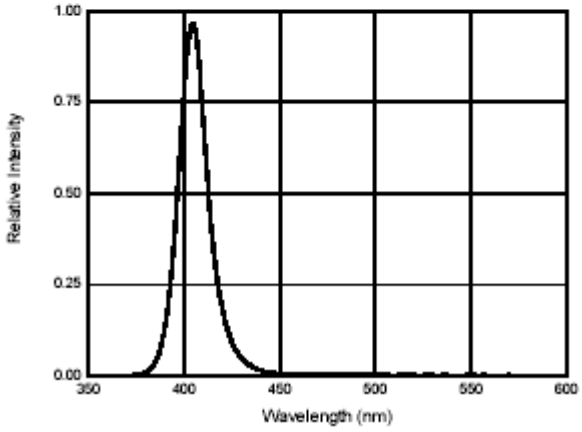
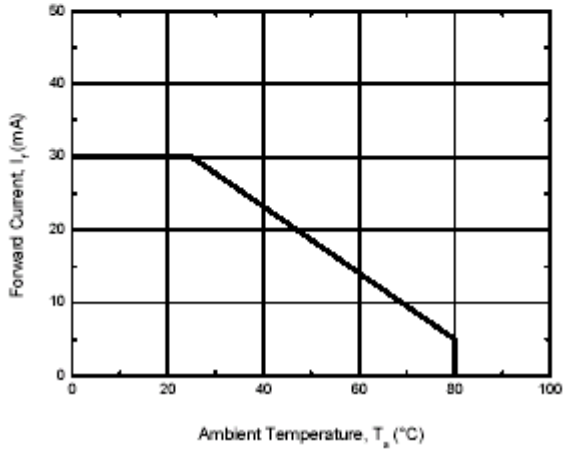
TYPICAL ELECTRICAL CHARACTERISTICS CURVES (at 20 mA DC / T_A = 25°C)









GENERAL NOTES:

1. Total Radiant Flux (P), a radiometric measurement, is obtained by measuring with an integrating sphere and a light sensor filter combination (spectroradiometer) and is the Total Light Energy (Flux) emitted by the LED lamp in all directions (isotropic). Radiant Intensity (I) is the portion of the light energy within a 3˚ solid angle in the optical axis.
2. Total Radiant Flux measurement uncertainty is +/- 15% due to test procedures and equipment variations.
3. θ1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity. Tolerance +/- 3°.
4. Dominant wavelength is derived from the 1931 CIE 2° Observer Chromaticity Diagram.
5. Peak and Dominant wavelength measurement uncertainty is +/- 0.05 due to variations.
6. Caution for ESD: Static Electricity and surges can damage the LED. It is recommended using a wristband or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.
7. Do not apply excess mechanical stress to the leads, especially when heated or while soldering.

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PRODUCT CODE BREAKDOWN

X_1X_2 - X_3 X_4 X_5X_6 X_7 X_8 X_9X_{10} X_{11} -X_{12} X_{13}

Manufacturer
BL= Brite-LED
PL=PowerLED
SG=SinoGerman

Package Type
L= Lamp TH

Product Series

Emitted Color
UV= Ultra-Violet

Lens Size
5= 5mm

Lens Shape
N= Normal Round

Viewing Angle
38= 38°

Lens Resin
C= Clear

Lead Stoppers
N=No Stoppers
S= with Stoppers

Delivery
B= Bulk
R= Reel
A= Ammo