## High Brightness Orange LED Lamp

3mm Round Through-Hole Package

## BL-LUOR3N25C-SB



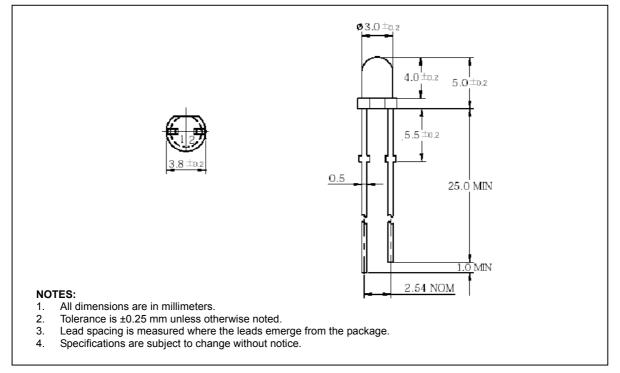
# FEATURES APPL

- High Output Orange 618nm LED
- AllnGaP with BR on GaAs die.
- 3mm round resin mold; water Clear Lens.
- Wide viewing angle ( $25^{\circ} 30^{\circ}$ ).
- Lead stoppers (standoffs)

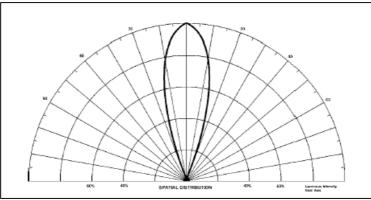
#### APPLICATIONS

- Displays and signage
- Automotive intstrument backlighting
- LCD backlighting
- Decorative /Accent Lighting

#### PACKAGE OUTLINE DIMENSIONS



#### **BEAM RADIATION PATTERN**



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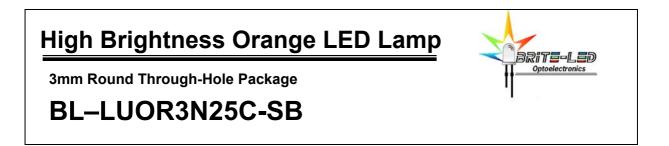


Parameter	Symbol	Value	Unit				
Continuous Forward Current	I <sub>F</sub>	40	mA				
Peak Forward Current (1/16 Duty Cycle, 0.1msec Pulse width)	I <sub>Fp</sub>	<b>І<sub>Fp</sub> 150</b>					
Power Dissipation	Pd	120	mW				
Forward Voltage	V <sub>f</sub>	2.5	V				
Derating Factor	D <sub>F</sub>	0.4	mA / °C				
Reverse Voltage	V <sub>R</sub>	5.0	V				
Operating Temperature	T <sub>opr</sub>	-40 to +90	°C				
Storage Temperature	T <sub>stg</sub>	-40 to +110	°C				
Lead Soldering Temperature (1.6mm (0.063") from body)	260°C for 5 seconds						

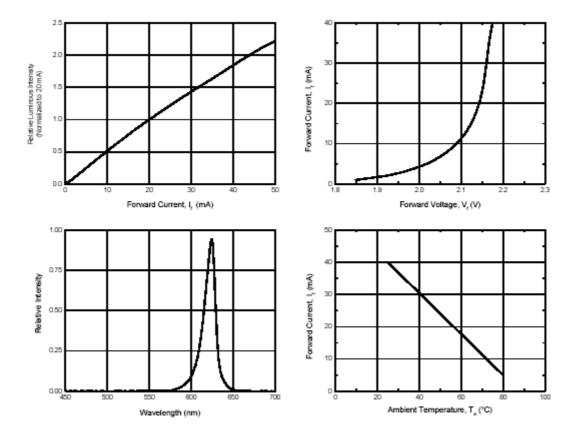
### ABSOLUTE MAXIMUN RATING (at $T_A = 25^{\circ}C$ )

### ELECTRICAL / OPTICAL CHARACTERISTICS (at $T_A = 25^{\circ}C$ )

Parameter		Symbol	Min	Тур	Max	Unit
Forward Voltage	F= 20 mA	VF		2.0	2.5	V
Luminous Intensity	F= 20 mA	l <sub>v</sub>	1100	1600	1750	mcd
Dominant Wavelength	F= 20 mA	$\lambda_d$	614	618	622	nm
Peak Wavelength	F= 20 mA	λρ	620	624	628	nm
Spectrum Radiation Bandwidth	F= 20 mA	Δλ		18		nm
Viewing Angle		2 θ 1/2	24	25	30	deg
Reverse Current	<b>V</b> R= 5 V	l r		10	100	μA



### TYPICAL ELECTRICAL CHARACTERISTICS CURVES (at 20 mA DC / $T_A = 25^{\circ}$ C)



#### **GENERAL NOTES:**

- 1. Luminous Intensity (Iv), a photometric measurement, is obtained by measuring the LED lamp with a Spectral Goniometric Analyzer. It is the Light Energy (mW) emitted by the LED lamp in the forward axial direction (within a 3° solid angle (sr)).
- 2. Luminous Intensity measurement uncertainty is +/- 15% due to test procedures and equipment variations.
- 3. 01/2 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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Data Sheet 11/25/03 rev.

