

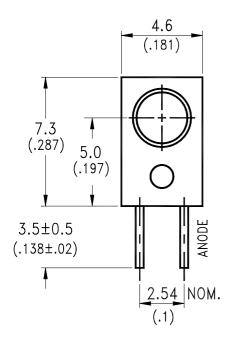
## LITEON LITE-ON ELECTRONICS, INC.

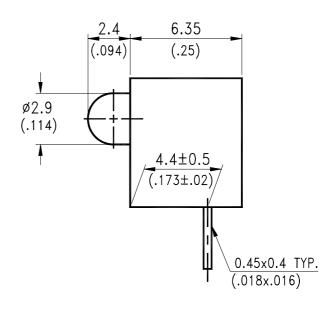
Property of Lite-On Only

#### **Features**

- \* Designed for ease in circuit board assembly.
- \* Black case enhance contrast ratio.
- \* Solid state light source.
- \* Reliable and rugged.

### **Package Dimensions**





Lamp Part No.	Lens	Source Color
LTL-4231N	Green Diffused	Green

### NOTES:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25$ mm(.010") unless otherwise noted.
- 3. The holder color is black.
- 4. Specifications are subject to change without notice.

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## Absolute Maximum Ratings at Ta=25℃

Parameter	Maximum Rating	Unit	
Power Dissipation	100	mW	
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	mA	
Continuous Forward Current	30	mA	
Derating Linear From 50°C	0.4	mA/°C	
Reverse Voltage	5	V	
Operating Temperature Range	-55°C to + 100°C		
Storage Temperature Range	-55°C to + 100°C		
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds		

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## Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv	3.7	12.6		mcd	I <sub>F</sub> = 10mA Note 1,4
Viewing Angle	2 0 1/2		60		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λp		565		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd		569		nm	Note 3
Spectral Line Half-Width	Δλ		30		nm	
Forward Voltage	VF		2.1	2.6	V	$I_F = 20 \text{mA}$
Reverse Current	IR			100	$\mu$ A	$V_R = 5V$
Capacitance	С		35		РF	$V_F = 0$ , $f = 1MHz$

Note: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

- 2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength,  $\lambda$  d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4. Iv needs  $\pm 15\%$  additionary for guaranteed limits.

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### Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

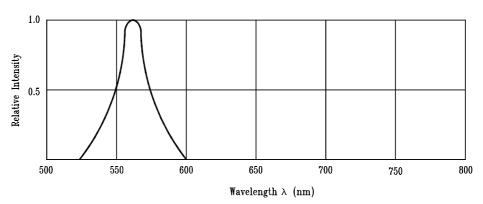


Fig.1 Relative Intensity vs. Wavelength

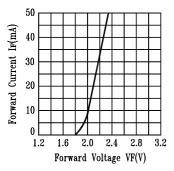


Fig.2 Forward Current vs. Forward Voltage

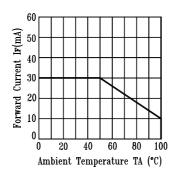


Fig.3 Forward Current
Derating Curve

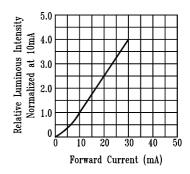


Fig.4 Relative Luminous Intensity vs. Forward Current

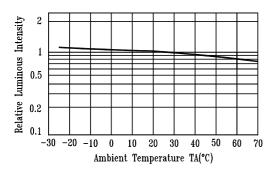


Fig.5 Luminous Intensity vs.
Ambient Temperature

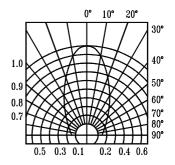


Fig.6 Spatial Distribution

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