



# Through Hole Lamp Product Data Sheet

## LTL-4296N

Spec No.: DS-20-95-0090

Effective Date: 05/23/2000

Revision: -

LITE-ON DCC

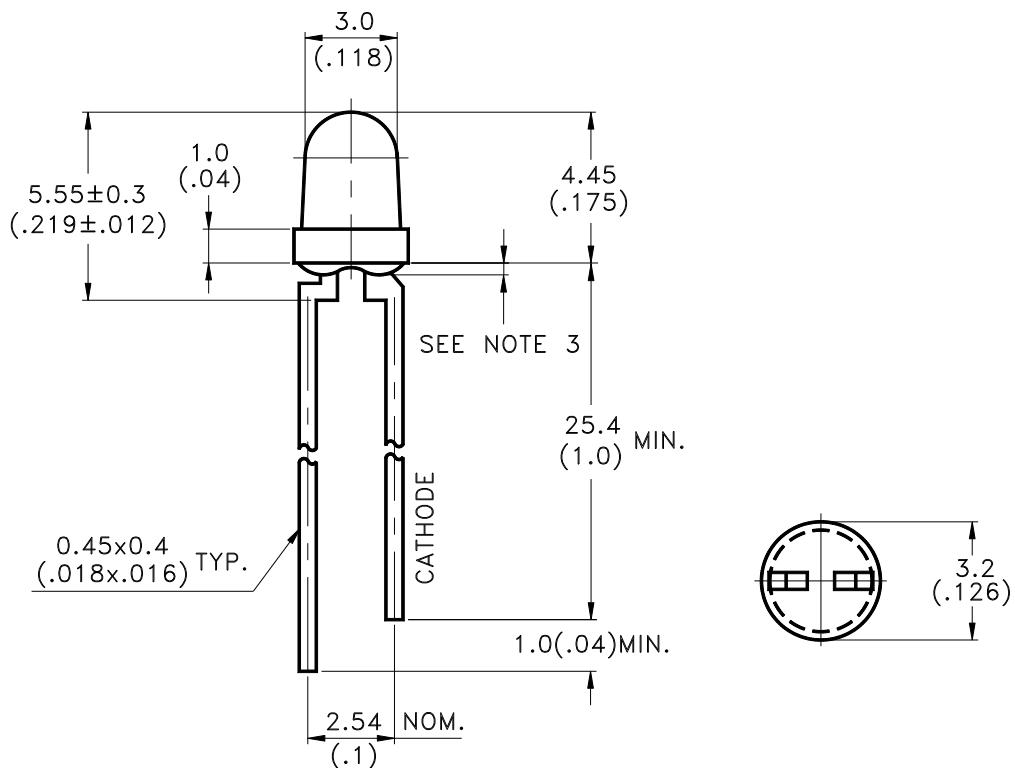
RELEASE

BNS-OD-FC001/A4

**LITE-ON Technology Corp. / Optoelectronics**  
No.90,Chien 1 Road, Chung Ho, New Taipei City 23585, Taiwan, R.O.C.  
Tel: 886-2-2222-6181 Fax: 886-2-2221-1948 / 886-2-2221-0660  
<http://www.liteon.com/opts>

**Features**

- \* High Intensity.
- \* Popular T-1 diameter package.
- \* Selected minimum intensities.
- \* General purpose leads.
- \* Reliable and rugged.

**Package Dimensions**

Part No.	Lens	Source Color
LTL-4296N	Water Clear	Red Orange

**Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm} (.010\text{"})$  unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.



LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

**Absolute Maximum Ratings at TA=25°C**

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	

**Electrical / Optical Characteristics at TA=25°C**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>V</sub>	19	60		mcd	I <sub>F</sub> = 10mA Note 1,4
Viewing Angle	2θ <sub>1/2</sub>		45		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λ <sub>P</sub>		630		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λ <sub>d</sub>		621		nm	Note 3
Spectral Line Half-Width	Δλ		40		nm	
Forward Voltage	V <sub>F</sub>		2.0	2.6	V	I <sub>F</sub> = 20mA
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> = 5V
Capacitance	C		20		pF	V <sub>F</sub> = 0, f = 1MHz

Note: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission International De L'Eclairage) eye-response curve.

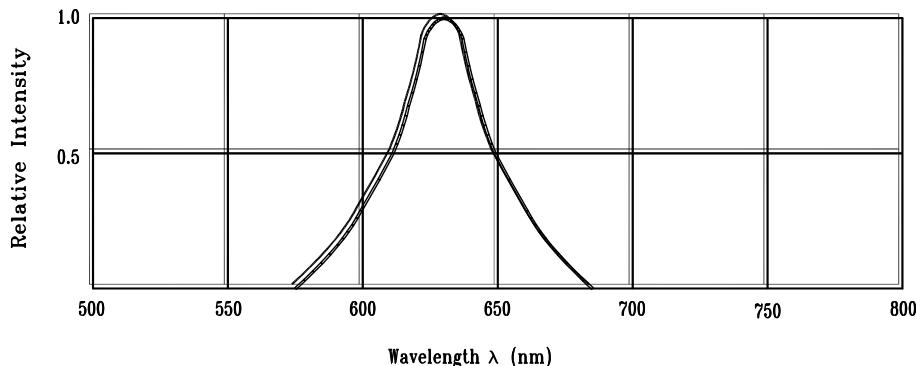
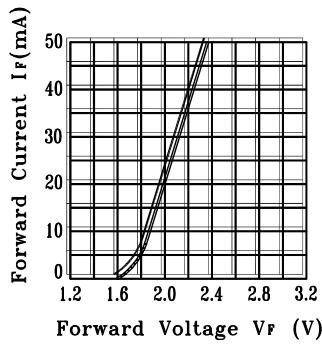
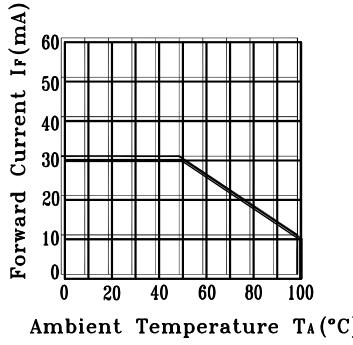
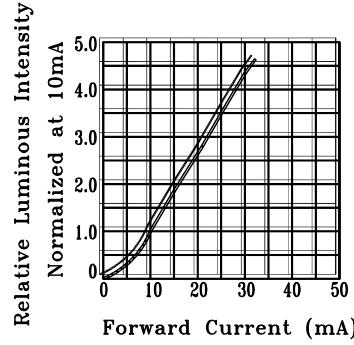
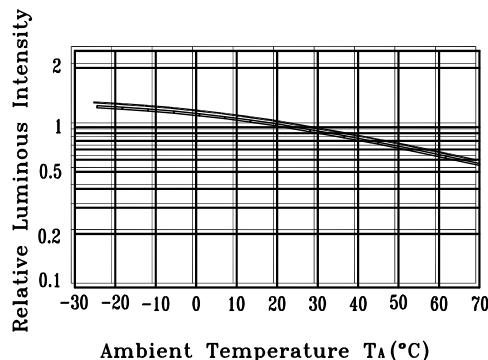
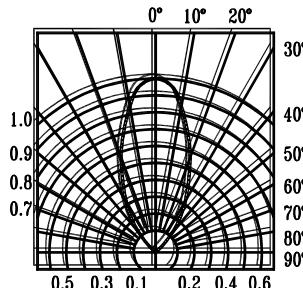
2. θ<sub>1/2</sub> is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

3. The dominant wavelength, λ<sub>d</sub> is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

4. The I<sub>V</sub> guarantee should be added ±15% .

**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