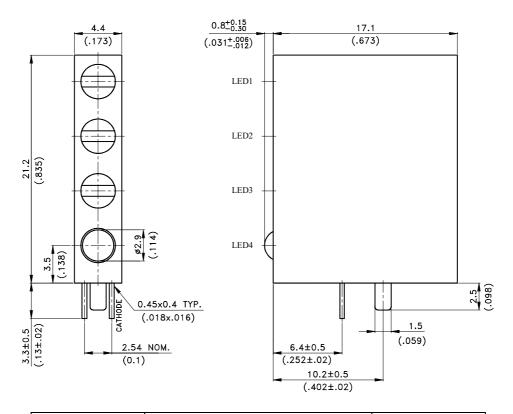
# LITEON ELECTRONICS, INC.

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. LED1~LED3 lamps are empty LED4 lamp is LTL-4231N.
- 5. Specifications are subject to change without notice.

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# 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			

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# ABSOLUTE MAXIMUM RATINGS AT Ta=25°C

Parameter	Symbol	Part No. LTL-	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv	42M2NH36P	3.7	12.6		mcd	$I_F = 10 \text{mA}$ Note 1,4
Viewing Angle	2 0 1/2	42M2NH36P		60		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λp	42M2NH36P		565		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	42M2NH36P		569		nm	Note 3
Spectral Line Half-Width	Δλ	42M2NH36P		30		nm	
Forward Voltage	VF	42M2NH36P		2.1	2.6	V	$I_F = 20 \text{mA}$
Reverse Current	$I_R$	42M2NH36P			100	$\mu$ A	$V_R = 5V$
Capacitance	С	42M2NH36P		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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# LITEON LITE-ON ELECTRONICS, INC.

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# TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

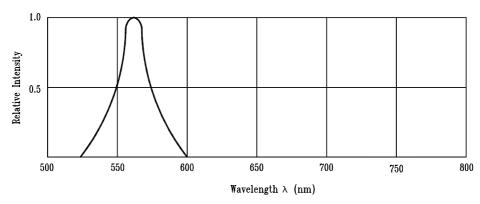


Fig.1 Relative Intensity vs. Wavelength

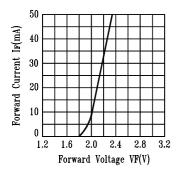


Fig.2 Forward Current vs. Forward Voltage

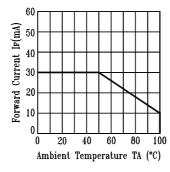


Fig.3 Forward Current Derating Curve

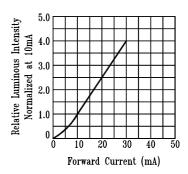


Fig.4 Relative Luminous Intensity vs. Forward Current

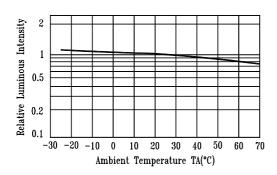


Fig.5 Luminous Intensity vs. Ambient Temperature

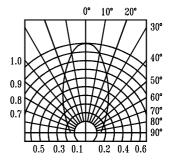


Fig.6 Spatial Distribution

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