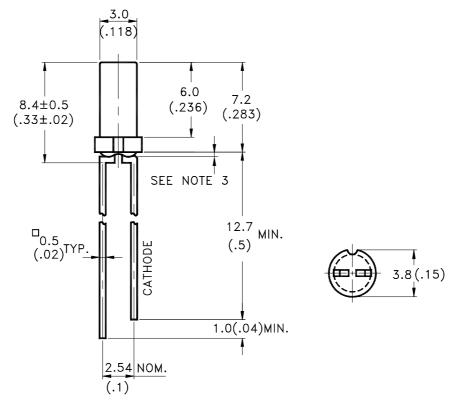
LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

Features

- * Cylindrical shape.
- * Low power consumption.
- * I.C. compatible
- * Long life solid state reliability.

Package Dimensions



Part No.	Lens	Source Color
LTL-2201A	Red Diffused	Red

NOTES:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ± 0.25 mm(.010") 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.

LITEON ELECTRONICS, INC.

Property of Lite-On Only

Absolute Maximum Ratings at TA=25°C

Parameter	Maximum Rating	Unit		
Power Dissipation	80	mW		
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	200	mA		
Continuous Forward Current	40	mA		
Derating Linear From 50°C	0.5	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			

Part No.: LTL-2201A Page: 4



LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv	0.1	0.3		mcd	I _F = 10mA Note 1,4
Viewing Angle	2 θ 1/2		180		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λР		655		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd		651		nm	Note 3
Spectral Line Half-Width	Δλ		24		nm	
Forward Voltage	V_{F}		1.7	2.0	V	$I_F = 20 \text{mA}$
Reverse Current	IR			100	μΑ	$V_R = 5V$
Capacitance	С		30		pF	$V_F = 0$, $f = 1MHz$

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

Part No.: LTL-2201A	Page:	3	of	4	
---------------------	-------	---	----	---	--

Property of Lite-On Only

Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

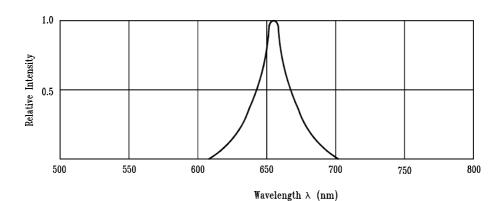


Fig.1 Relative Intensity vs. Wavelength

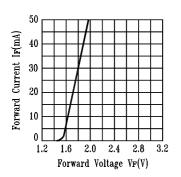


Fig.2 Forward Current vs.
Forward Voltage

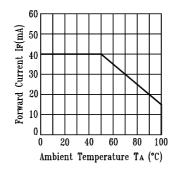


Fig.3 Forward Current
Derating Curve

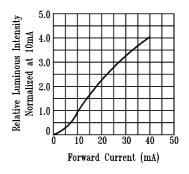


Fig.4 Relative Luminous Intensity vs. Forward Current

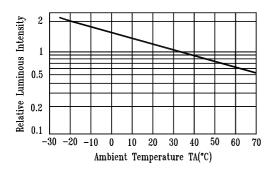


Fig.5 Luminous Intensity vs.
Ambient Temperature

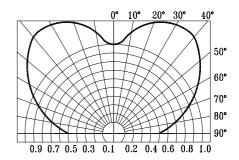


Fig.6 Spatial Distribution

Part No.: LTL-2201A Page: 4 of 4