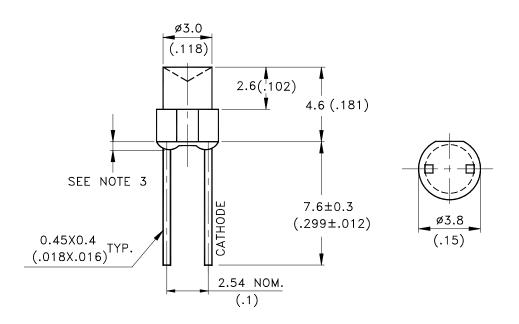
LITEON ELECTRONICS, INC.

Property of Lite-On Only

Features

- * Low power consumption.
- * Wide viewing angle.
- * Long life-solid state reliability.

Package Dimensions



Part No.	Lens	Source Color
LTL-81HGECP	Green Transparent	Green

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.

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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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Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv	3.7	12.6		mcd	$I_F = 20 \text{mA}$ Note 1,4
Viewing Angle	2 θ 1/2		130		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λР		565		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd		569		nm	Note 3
Spectral Line Half-Width	Δλ		30		nm	
Forward Voltage	V_{F}		2.1	2.6	V	$I_F = 20 \text{mA}$
Reverse Current	I_R			100	μ A	$V_R = 5V$
Capacitance	С		35		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 $\pm 15\%$.

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Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

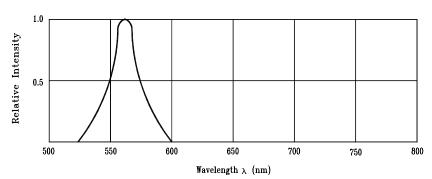
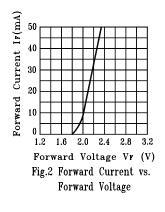
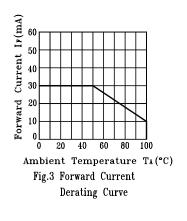
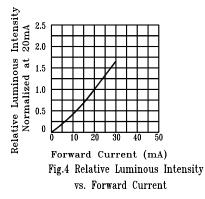
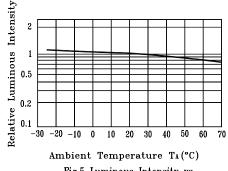


Fig.1 Relative Intensity vs. Wavelength









mbient Temperature TA(°C Fig.5 Luminous Intensity vs. Ambient Temperature

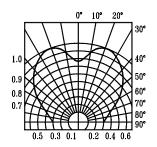


Fig.6 Spatial Distribution

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