

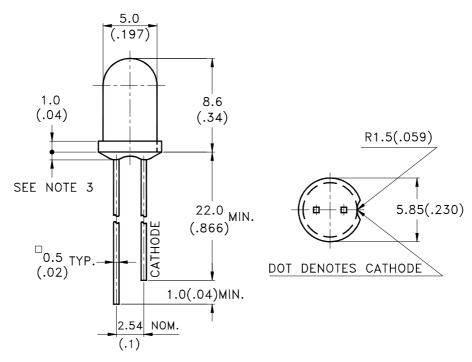
# LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

#### **Features**

- \* High Intensity.
- \* Popular T-1 3/4 diameter Package.
- \* Selected minimum intensities.
- \* Wide viewing Angle.
- \* General purpose leads.
- \* Reliable and rugged.

#### **Package Dimensions**



Part No.	Lens	Source Color
LTL-307KE-112A	Water Clear	Pure Green

#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm$  0.25mm(.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℃

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	$I_F = 10 \text{mA}$ Note 1,4
Viewing Angle	2 heta 1/2		40		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λР		555		nm	Measurement  @Peak (Fig.1)
Dominant Wavelength	$\lambda$ d		557		nm	Note 3
Spectral Line Half-Width	Δλ		30		nm	
Forward Voltage	$V_{\mathrm{F}}$		2.1	2.6	V	$I_F = 20 \text{mA}$
Reverse Current	$I_{ m R}$			100	μΑ	$V_R = 5V$
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,  $\lambda$  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)

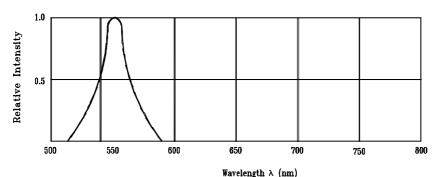
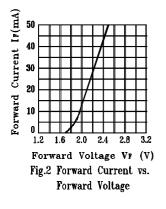
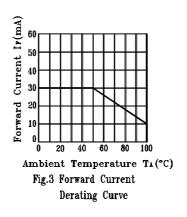
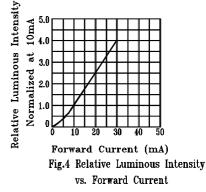


Fig.1 Relative Intensity vs. Wavelength







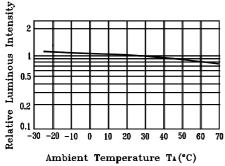


Fig.5 Luminous Intensity vs. Ambient Temperature

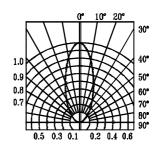


Fig.6 Spatial Distribution

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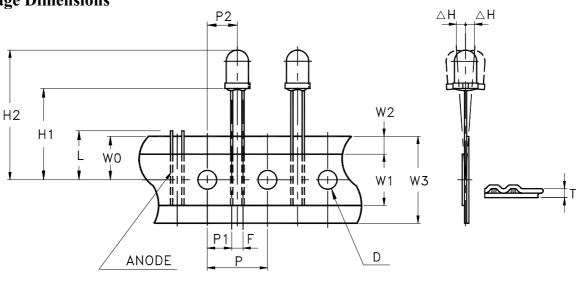
## LITEON ELECTRONICS, INC.

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#### **Features**

- \* Compatible with radial lead automatic insertion equipment.
- \* Most radial lead plastic lead lamps available packaged in tape and folding.
- \* 2.54mm (0.1") straight lead spacing available.
- \* Folding packaging simplifies handling and testing.

### **Package Dimensions**



TAPE	FEED	DIRECTION

		Specification			
Item	Symbol	Minimum		Maximum	
		mm	inch	mm	inch
Tape Feed Hole Diameter	D	3.8	0.149	4.2	0.165
Component Lead Pitch	F	2.3	0.091	3.0	0.118
Front to Rear Deflection	△Н			2.0	0.078
Feed Hole to Bottom of Component	H1	21.5	0.846	22.5	0.886
Feed Hole to Overall Component Height	H2	29.9	1.177	31.4	1.236
Lead Length After Component Height	L	W0		11.0	0.433
Feed Hole Pitch	Р	12.4	0.488	13.0	0.511
Lead Location	P1	4.4	0.173	5.8	0.228
Center of Component Location	P2	5.05	0.198	7.65	0.301
Total Taped Thickness	Т			0.90	0.035
Feed Hole Location	W0	8.5	0.334	9.75	0.384
Adhesive Tape Width	W1	12.5	0.492	13.5	0.531
Adhesive Tape Position	W2	0	0	3.0	0.118
Tape Width	W3	17.5	0.689	19.0	0.748

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