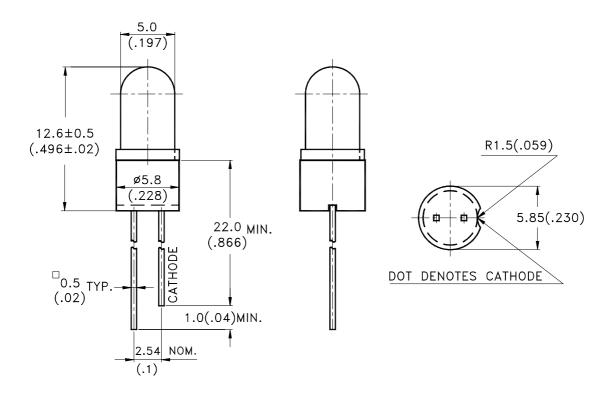


#### Property of Lite-On Only

#### **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<br>Color |
|---------------|----------------|-----------------|
| LTL-307G      | Green Diffused | Green           |

#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25$ mm(.010") unless otherwise noted.
- 3. The spacer color is black.

| Part No.: LTL-307G08A-D | Page: | 1 | of | 5 |  |
|-------------------------|-------|---|----|---|--|
|-------------------------|-------|---|----|---|--|



### Property of Lite-On Only

### 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                                | Current 30                                |       |  |  |
| Derating Linear From 50°C                                 | 0.4                                       | mA/°C |  |  |
| Reverse Voltage   | ltage 5                                   |       |  |  |
| Operating Temperature Range -55°C to + 100°C              |   |       |  |  |
| Storage Temperature Range                                 | torage Temperature Range -55°C to + 100°C |       |  |  |
| Lead Soldering Temperature [1.6mm(.063") From Body]       | 260°C for 5 Seconds                       |       |  |  |

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### Property of Lite-On Only

### Electrical Optical Characteristics at Ta=25°C

| Parameter                | Symbol           | Min. | Тур. | Max. | Unit    | Test Condition                    |
|--------------------------|------------------|------|------|------|---------|-----------------------------------|
| Luminous Intensity       | Iv               | 5.6  | 19   |      | mcd     | I <sub>F</sub> = 10mA<br>Note 1,4 |
| Viewing Angle            | 2 \theta 1/2     |      | 50   |      | deg     | Note 2 (Fig.6)                    |
| Peak Emission Wavelength | λp               |      | 565  |      | nm      | Measurement @Peak (Fig.1)         |
| Dominant Wavelength      | λd               |      | 569  |      | 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          | $I_R$            |      |      | 100  | $\mu$ A | $V_R = 5V$                        |
| Capacitance              | С                |      | 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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|-------------------------|-------|---|----|---|--|
| Tare No., LTL-30/G00A-D | rage. | 5 | OI | 5 |  |

Property of Lite-On Only

#### Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

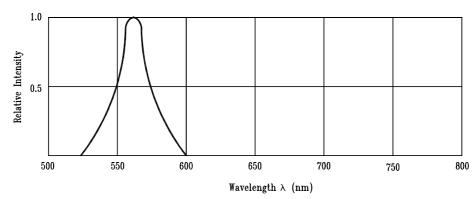


Fig.1 Relative Intensity vs. Wavelength

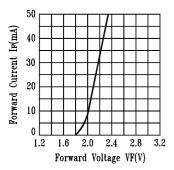


Fig.2 Forward Current vs. Forward Voltage

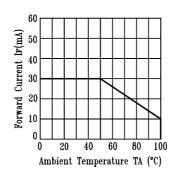


Fig.3 Forward Current **Derating Curve** 

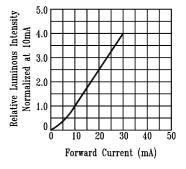


Fig.4 Relative Luminous Intensity vs. Forward Current

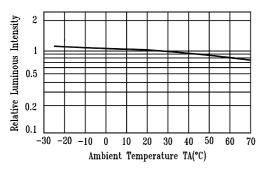


Fig.5 Luminous Intensity vs. Ambient Temperature

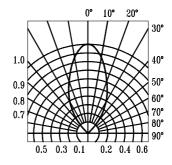


Fig.6 Spatial Distribution

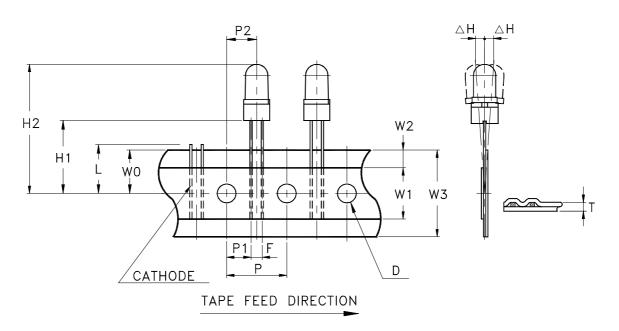
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### Property of Lite-On Only

#### **Features**

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

#### **Package Dimensions**



|                                       | Symbol        | Specification |       |         |       |  |
|---------------------------------------|---------------|---------------|-------|---------|-------|--|
| Item                                  |               | Minir         | num   | 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              | $\triangle H$ |               |       | 2.0     | 0.078 |  |
| Feed Hole to Bottom of Component      | H1            | 17.5          | 0.689 | 18.5    | 0.728 |  |
| Feed Hole to Overall Component Height | H2            | 29.6          | 1.165 | 31.6    | 1.244 |  |
| Lead Length After Component Height    | L             | W0            |       | 11.0    | 0.433 |  |
| Feed Hole Pitch                       | P             | 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                 | T             |               |       | 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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