



**Spec No.: DS-30-97-120**Effective Date: 01/19/2005

Revision: A

**LITE-ON DCC** 

**RELEASE** 

BNS-OD-FC001/A4

# LITEON

# LITE-ON TECHNOLOGY CORPORATION

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#### **FEATURES**

- \*0.56 inch (14.22 mm) DIGIT HEIGHT
- \*CONTINUOUS UNIFORM SEGMENTS
- \*LOW POWER REQUIREMENT
- \*EXCELLENT CHARACTERS APPEARANCE
- \*HIGH BRIGHTNESS & HIGH CONTRAST
- \*WIDE VIEWING ANGLE
- **\* SOLID STATE RELIABILITY**
- \*CATEGORIZED FOR LUMINOUS INTENSITY
- \*LEAD-FREE PACKAGE (ACCORDING TO ROHS)

#### **DESCRIPTION**

The LTS-6460G is a 0.56 inch (14.22 mm) digit height—single digit seven-segment display. This device uses green LED chips(GaP epi on GaP substrate). The display has gray face and white segments.

#### **DEVICE**

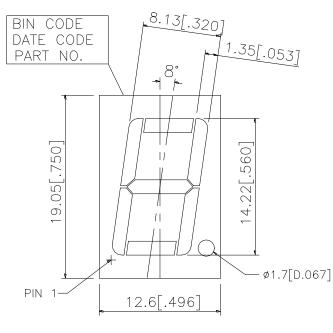
| PART NO.  | DESCRIPTION      |  |  |  |
|-----------|------------------|--|--|--|
| GREEN     | Common Anode     |  |  |  |
| LTS-6460G | Rt. Hand Decimal |  |  |  |

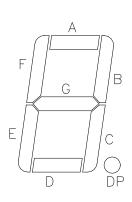
PART NO.: LTS-6460G PAGE: 1 of 5

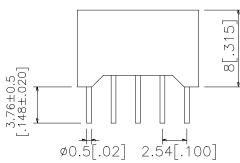
# LITE-ON TECHNOLOGY CORPORATION

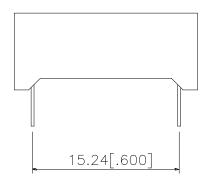
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# PACKAGE DIMENSIONS



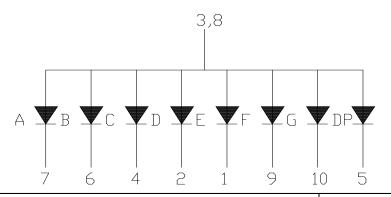






NOTES: All dimensions are in millimeters. Tolerance: ± 0.25-mm (0.01") unless otherwise noted.

#### INTERNAL CIRCUIT DIAGRAM



PART NO.: LTS-6460G PAGE: 2 of 5



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## PIN CONNECTION

| No. | CONNECTION   |
|-----|--------------|
| 1   | CATHODE E    |
| 2   | CATHODE D    |
| 3   | COMMON ANODE |
| 4   | CATHODE C    |
| 5   | CATHODE D.P. |
| 6   | CATHODE B    |
| 7   | CATHODE A    |
| 8   | COMMON ANODE |
| 9   | CATHODE F    |
| 10  | CATHODE G    |

PART NO.: LTS-6460G PAGE: 3 of 5



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### **ABSOLUTE MAXIMUM RATING**

| PARAMETER  | MAXIMUM RATING                     | UNIT               |  |  |
|--|------------------------------------|--------------------|--|--|
| Power Dissipation Per Segment  | 75                                 | mW                 |  |  |
| Peak Forward Current Per Segment ( Frequency 1Khz, 10% duty cycle )        | 100*                               | mA                 |  |  |
| Continuous Forward Current Per Segment                                     | 25                                 | mA                 |  |  |
| Forward Current Derating from 25 <sup>o</sup> C                            | 0.33                               | mA/ <sup>0</sup> C |  |  |
| Reverse Voltage Per Segment  | 5                                  | V                  |  |  |
| Operating Temperature Range  | $-35^{\circ}$ C to $+85^{\circ}$ C |                    |  |  |
| Storage Temperature Range  | $-35^{\circ}$ C to $+85^{\circ}$ C |                    |  |  |
| Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260°C |                                    |                    |  |  |

<sup>\*</sup> see figure 5 to establish pulsed condition

### ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

| PARAMETER  | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION       |
|--|--------|------|------|------|------|----------------------|
| Average Luminous Intensity                             | Iv     | 870  | 2400 |      | μcd  | I <sub>F</sub> =10mA |
| Peak Emission Wavelength                               | λр     |      | 565  |      | nm   | I <sub>F</sub> =20mA |
| Spectral Line Half-Width                               | Δλ     |      | 30   |      | nm   | I <sub>F</sub> =20mA |
| Dominant Wavelength                                    | λd     |      | 569  |      | nm   | I <sub>F</sub> =20mA |
| Forward Voltage Per Segment                            | VF     |      | 2.1  | 2.6  | V    | I <sub>F</sub> =20mA |
| Reverse Current Per Segment                            | Ir     |      |      | 100  | μΑ   | V <sub>R</sub> =5V   |
| Luminous Intensity Matching Ratio (Similar Light Area) | Iv-m   |      |      | 2:1  |      | I <sub>F</sub> =10mA |

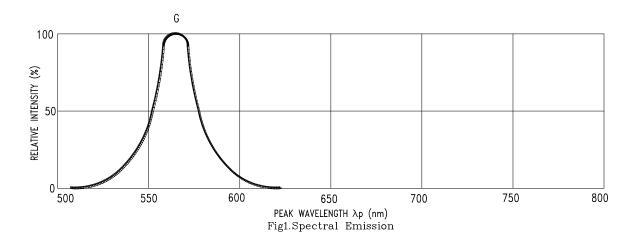
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclariage) eye-response curve.

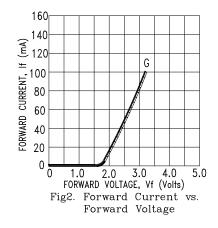
| PART NO.: LTS-6460G | PAGE: | 4 of 5 |  |
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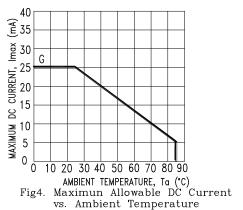
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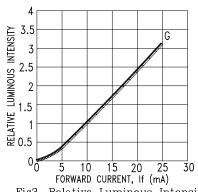
### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

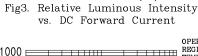
(25°C Ambient Temperature Unless Otherwise Noted)

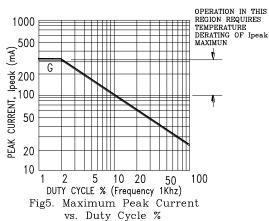












NOTE: G=GREEN.

PART NO.: LTS-6460G PAGE: 5 of 5