



LED Display

Product Data Sheet

LTD-323G-23

Spec No.: DS30-2004-096

Effective Date: 03/08/2006

Revision: B

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LITE-ON Technology Corp. / Optoelectronics

No.90,Chien 1 Road, Chung Ho, New Taipei City 23585, Taiwan, R.O.C.

Tel: 886-2-2222-6181 Fax: 886-2-2221-1948 / 886-2-2221-0660

<http://www.liteon.com/opto>

FEATURES

- * 0.3 inch (7.6 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

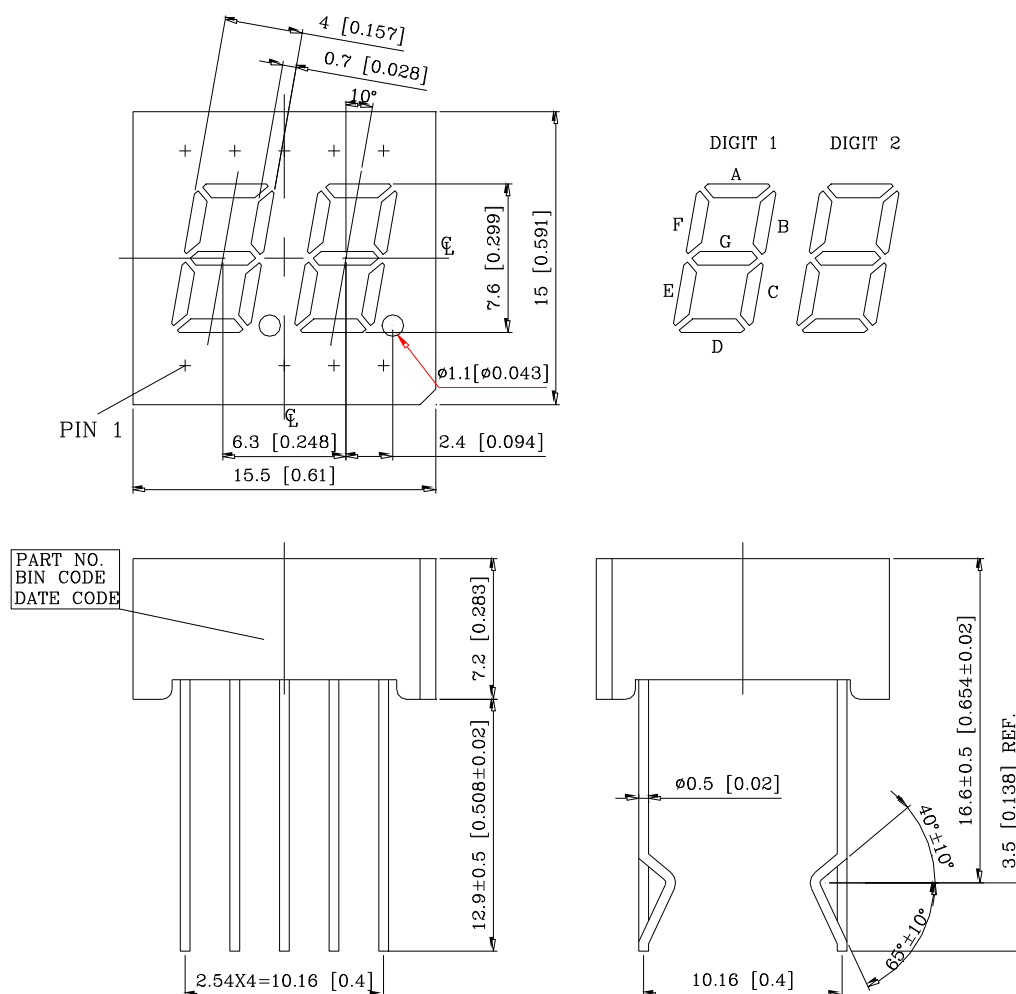
DESCRIPTION

The LTD-323G-23 is a 0.3 inch (7.6 mm) digit height dual digit seven-segment display. This device uses Green LED chips(GaP epi on GaP substrate). The display has black face and green segments.

DEVICE

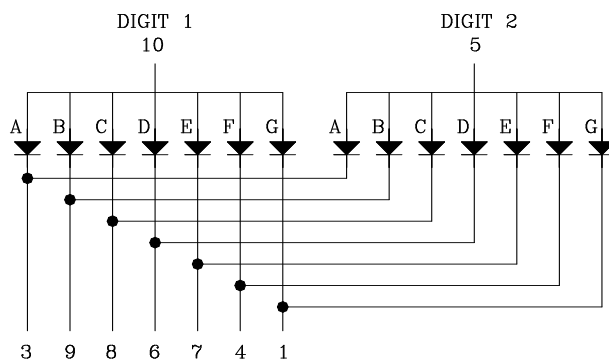
| PART NO. | DESCRIPTION |
|-------------|-----------------------|
| GREEN | Dualplex Common Anode |
| LTD-323G-23 | |

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

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 ⁰ C | 0.33 | mA/°C |
| Reverse Voltage Per Segment | 5 | V |
| Operating Temperature Range | -35°C to +85°C | |
| Storage Temperature Range | -35°C to +85°C | |
| Soldering Conditions : 1/16 inch below seating plane for 3 seconds at 260 ⁰ C | | |

* see figure 5 to establish pulsed condition

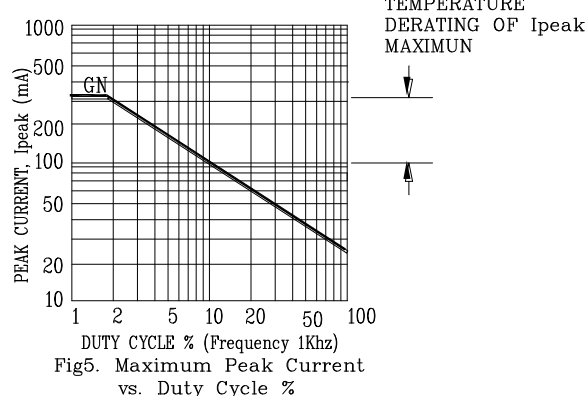
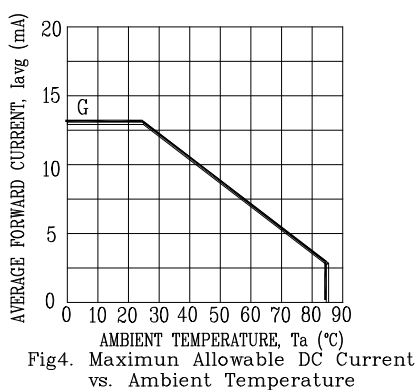
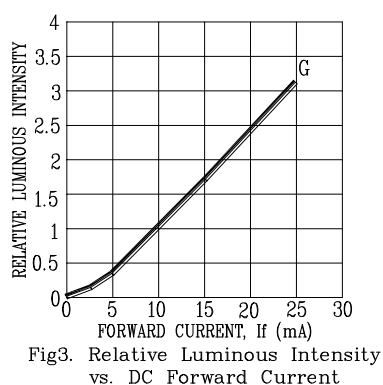
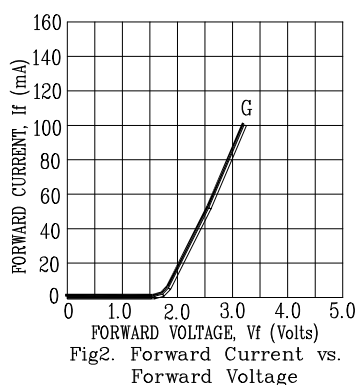
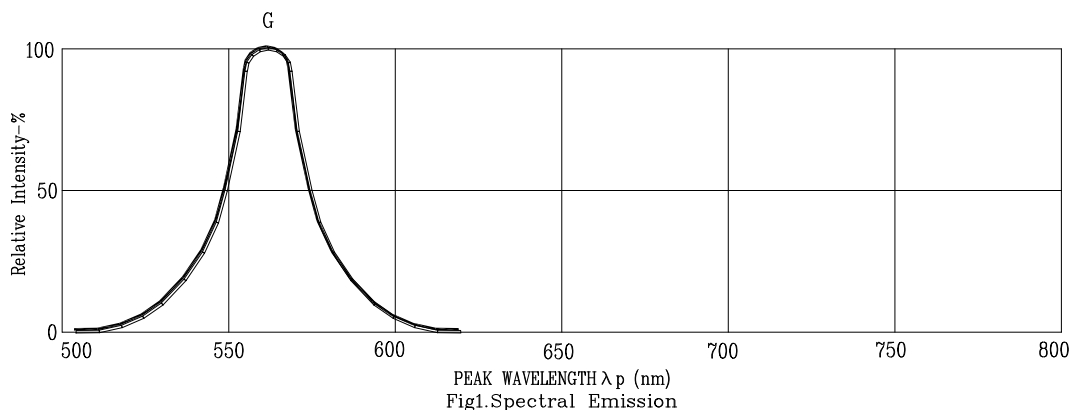
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25⁰C

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION |
|-----------------------------------|-------------------|------|------|------|------|----------------------|
| Average Luminous Intensity | I _v | 500 | 1600 | | μcd | I _F =10mA |
| Peak Emission Wavelength | λ _p | | 565 | | nm | I _F =20mA |
| Spectral Line Half-Width | Δλ | | 30 | | nm | I _F =20mA |
| Dominant Wavelength | λ _d | | 569 | | nm | I _F =20mA |
| Forward Voltage Per Segment | V _F | | 2.1 | 2.6 | V | I _F =20mA |
| Reverse Current Per Segment | I _R | | | 100 | μA | V _R =5V |
| Luminous Intensity Matching Ratio | I _v -m | | | 2:1 | | I _F =10mA |

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

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: G=GREEN