



**Spec No.: DS-30-94-155**Effective Date: 05/04/2000

Revision: -

**LITE-ON DCC** 

**RELEASE** 

BNS-OD-FC001/A4

## Property of Lite-On Only

#### **FEATURES**

- \*0.56INCH (14.22mm) 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-5403G is a 0.56inch (14.22mm) digit height dual digit seven-segment display. The device utilizes green LED chips, which are made from GaP on a transparent GaP substrate, and has a gray face and green segments.

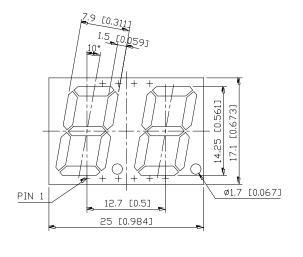
#### **DEVICE**

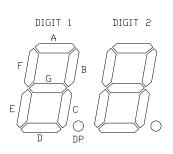
PART NO.	DESCRIPTION			
GREEN	COMMON ANODE			
LTD-5403G	RT. HAND DECIMAL			

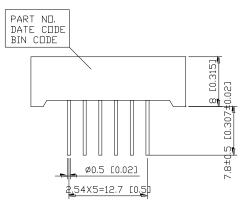
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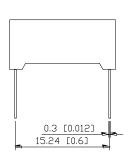
Property of Lite-On Only

### PACKAGE DIMENSIONS



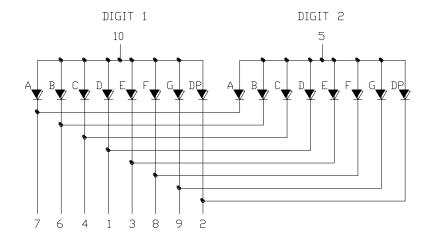






NOTES: All dimensions are in millimeters. Tolerances are  $\pm$  0.25 mm unless otherwise noted.

### INTERNAL CIRCUIT DIAGRAM



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### PIN CONNECTION

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

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### ABSOLUTE MAXIMUM RATING AT $T_A=25$ °C

PARAMETER	MAXIMUM RATING	UNIT			
Power Dissipation Per Chip	75	mW			
Peak Forward Current Per Chip ( 1/10 Duty Cycle, 0.1ms Pulse Width )	100	mA			
Continuous Forward Current Per Chip	25	mA			
Derating Linear From 25°C Per Chip	0.33	mA/°C			
Reverse Voltage Per Chip	5	V			
Operating Temperature Range -35°C to +85°C					
Storage Temperature Range $-35^{\circ}\text{C}$ to $+85^{\circ}\text{C}$					
Solder Temperature: max 260°C for max 3sec at 1.6mm below seating plane					

## TRICAL / OPTICAL CHARACTERISTICS AT $T_A=25^{\circ}C$

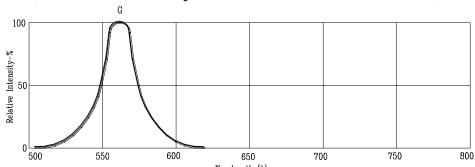
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	870	2400		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λр		565		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		30		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λd		569		nm	I <sub>F</sub> =20mA
Forward Voltage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

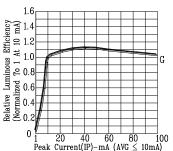
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

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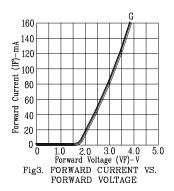
### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)





0 1 20 40 60 80 100
Peak Current(IP)-mA (AVG ≤ 10mA)
Fig2. RELATIVE LUMINOUS EFFICIENCY
(LUMINOUS INTENSITY PER UNIT
CURRENT) VS. PEAK CURRENT
(REFRESH RATE 1KHz)



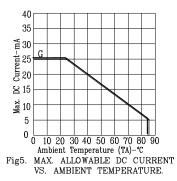
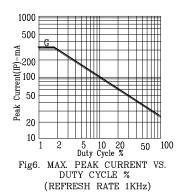


figure 1 (Fig. 1) (Fig. 4) (Fi



NOTE: G=GREEN

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