



**Spec No.: DS30-2003-079** Effective Date: 04/15/2003

Revision: -

**LITE-ON DCC** 

**RELEASE** 

BNS-OD-FC001/A4

## **Property of Lite-On Only**

#### **FEATURES**

- \*RECTANGULAR LIGHT BAR
- \*LARGE, BRIGHT, UNIFORM LIGHT EMITTING AREAS
- \*LOW POWER REQUIREMENT
- \*HIGH BRIGHTNESS & HIGH CONTRAST
- **\* SOLID STATE RELIABILITY**
- \*CATEGORIZED FOR LUMINOUS INTENSITY

#### **DESCRIPTION**

The LTA-1000G-04 is a ten rectangular light sources array display designed for a variety of applications where a continuously large, bright source of light is required. This device uses GREEN LED chips (GaP epi on GaP substrate). The display has a gray face and white segments.

#### **DEVICE**

PART NO.	<b>DESCRIPTION</b> Universal			
GREEN				
LTA-1000G-04	Ten Rectangular Bar			

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BNS-OD-C131/A4

**Property of Lite-On Only** 

## **PACKAGE DIMENSIONS** 5.08 [0.2] K 0 Н 25.27 [0.995] G F Ε [0.07] $\mathsf{D}$ С 1.78 В Α PIN NO.1 PART NO. DATE CODE BIN CODE 0.16 [0.4] [0.315] 7±0.5 [0.276±0.02] 0.3 [0.012]

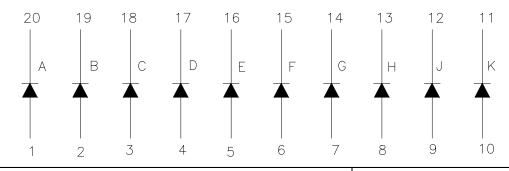
NOTES: All dimensions are in millimeters. Tolerances are ± 0.25 mm (0.01") unless otherwise noted.

0.5 [0.02]

2.54X9=22.86 [0.9]

### INTERNAL CIRCUIT DIAGRAM

7.62 [0.3]



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### PIN CONNECTION

No.	CONNECTION		
1	Anode A		
2	Anode B		
3	Anode C		
4	Anode D		
5	Anode E		
6	Anode F		
7	Anode G		
8	Anode H		
9	Anode J		
10	Anode K		
11	Cathode K		
12	Cathode J		
13	Cathode H		
14	Cathode G		
15	Cathode F		
16	Cathode E		
17	Cathode D		
18	Cathode C		
19	Cathode B		
20	Cathode A		

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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 <sup>o</sup> 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 Per Segment	Iv	540	2000		μcd	$I_F = 10mA$
Peak Emission Wavelength	λр		565		nm	$I_F = 20 \text{mA}$
Spectral Line Half-Width	Δλ		30		nm	$I_F = 20 \text{mA}$
Dominant Wavelength	λd		569		nm	$I_F = 20 \text{mA}$
Forward Voltage Per Segment	$V_{\mathrm{F}}$		2.1	2.6	V	$I_F = 20 \text{mA}$
Reverse Current Per Segment	Ir			100	μΑ	$V_R = 5V$
Luminous Intensity Matching Ratio	Iv-m			2:1		$I_F = 10 \text{mA}$

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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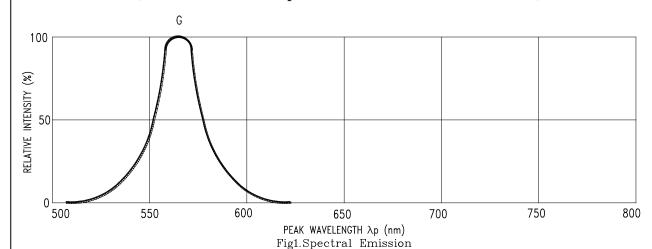
## LITEON

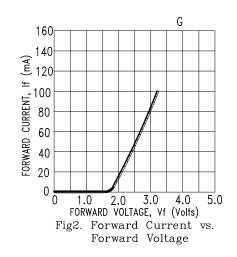
## LITE-ON TECHNOLOGY CORPORATION

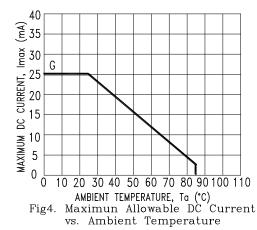
Property of Lite-On Only

#### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)







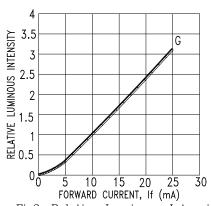
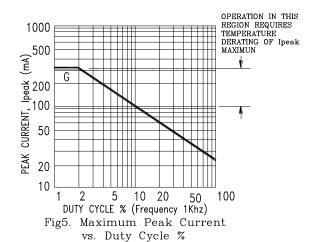


Fig3. Relative Luminous Intensity vs. DC Forward Current



NOTE: G = GREEN.

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