



# LED Display Product Data Sheet

## LTA-1000G-04

Spec No.: DS30-2003-079

Effective Date: 04/15/2003

Revision: -

**LITE-ON DCC**

**RELEASE**

BNS-OD-FC001/A4

**FEATURES**

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

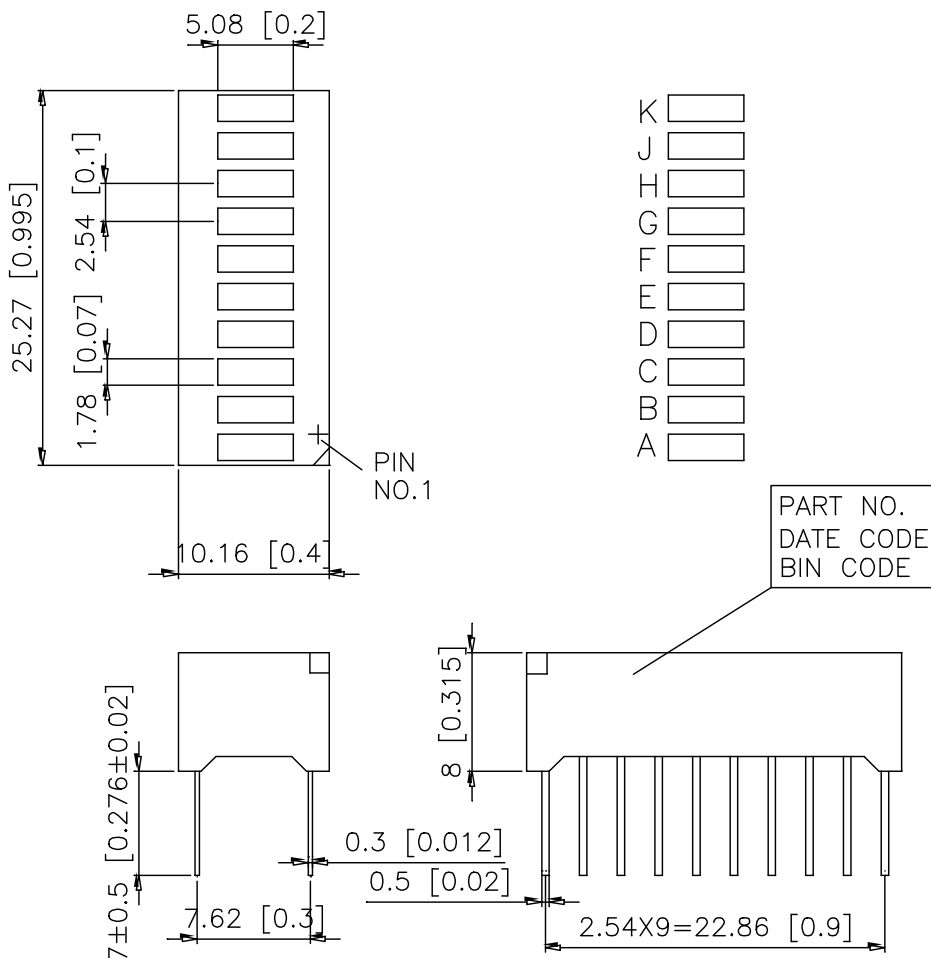
**DESCRIPTION**

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**

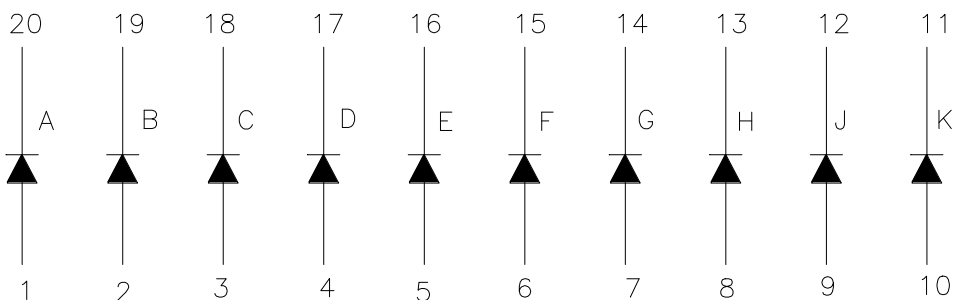
<b>PART NO.</b>	<b>DESCRIPTION</b>
GREEN	Universal
LTA-1000G-04	Ten Rectangular Bar

## PACKAGE DIMENSIONS



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

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

<b>No.</b>	<b>CONNECTION</b>
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

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

\* see figure 5 to establish pulsed condition

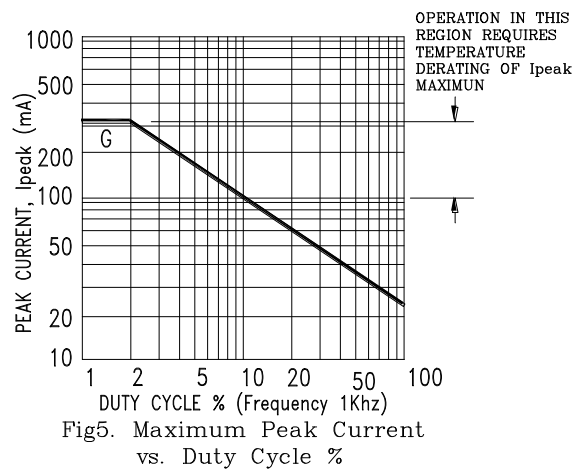
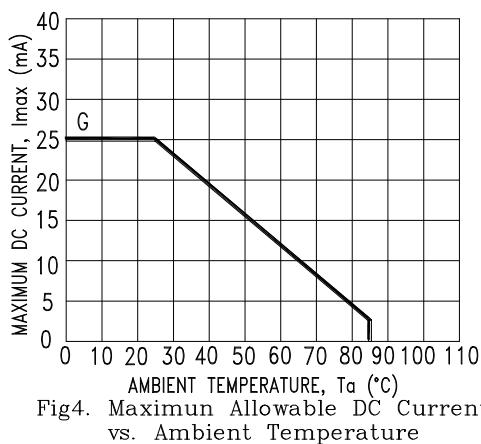
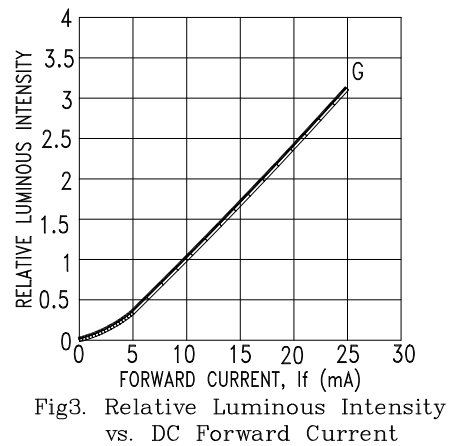
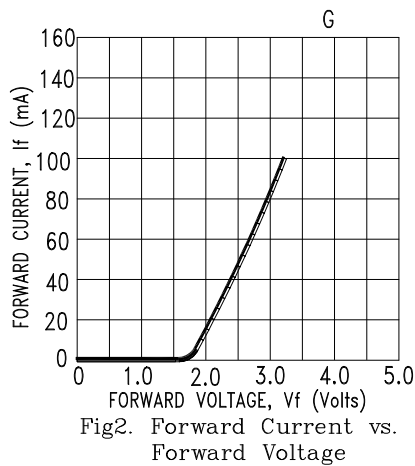
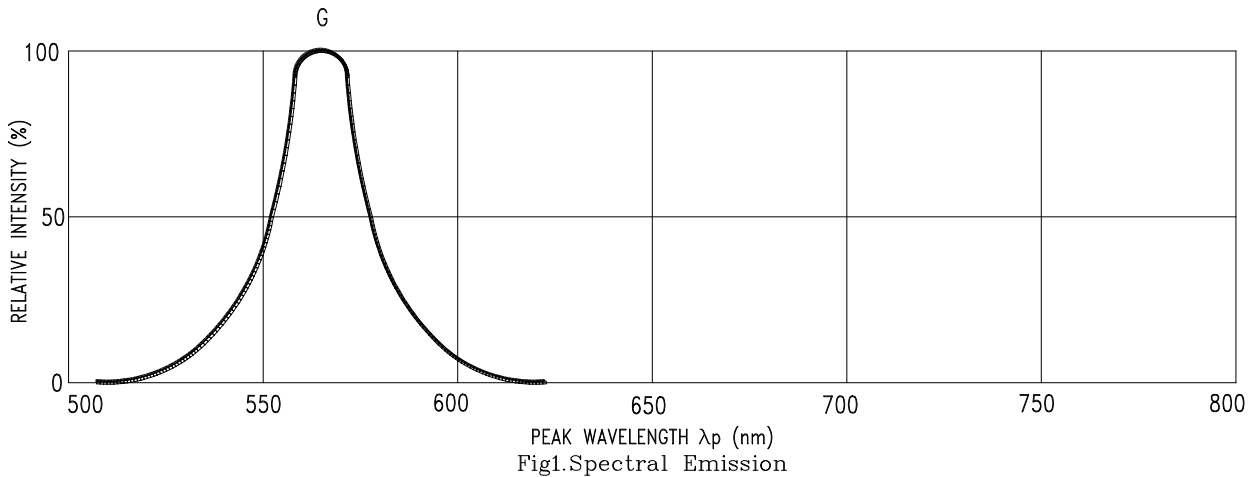
**ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25<sup>0</sup>C**

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	I <sub>v</sub>	540	2000		μcd	I <sub>F</sub> = 10mA
Peak Emission Wavelength	λ <sub>p</sub>		565		nm	I <sub>F</sub> = 20mA
Spectral Line Half-Width	Δλ		30		nm	I <sub>F</sub> = 20mA
Dominant Wavelength	λ <sub>d</sub>		569		nm	I <sub>F</sub> = 20mA
Forward Voltage Per Segment	V <sub>F</sub>		2.1	2.6	V	I <sub>F</sub> = 20mA
Reverse Current Per Segment	I <sub>R</sub>			100	μA	V <sub>R</sub> = 5V
Luminous Intensity Matching Ratio	I <sub>v</sub> -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.

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: G=GREEN.