



# LED Display Product Data Sheet LTS-50801JG

Spec No.: DS30-2008-0048

Effective Date: 03/21/2008

Revision: -

**LITE-ON DCC**

**RELEASE**

BNS-OD-FC001/A4

**LED DISPLAY****LTS-50801JG  
DATASHEET**

<u>Rev</u>	<u>Description</u>	<u>By</u>
<b>01</b>	<b>ORIGINAL</b> (Refer to contour drawing Revision (-))	<b><u>KITTISAK</u></b> <b><u>Feb29/2008</u></b>
<b>(Above data for PD and Customer tracking only)</b>		
<b>-</b>	<b>NPPR Received and Upload on OPNC</b>	<b><u>KITTISAK</u></b> <b><u>Mar 08/2008</u></b>

SPEC. NO.: DS30-2008-0048DATE : Mar 08/2008REV. NO. : -PAGE NO. : 0 OF 5

## **FEATURES**

- \* 5-INCH (127.0 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)**

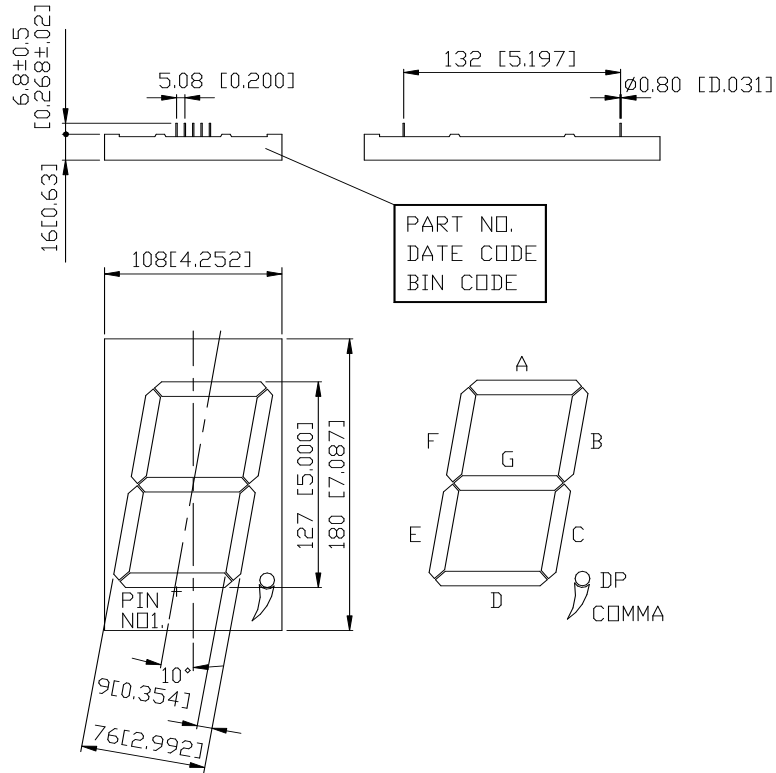
## **DESCRIPTION**

The LTS-50801JG is a 5-inch (127.0-mm) digit height single digit seven-segment display. This device uses AS-AllnGaP Green LED chips ( AllnGaP epi on GaAs substrate). The display has a black face and green segments.

## **DEVICE**

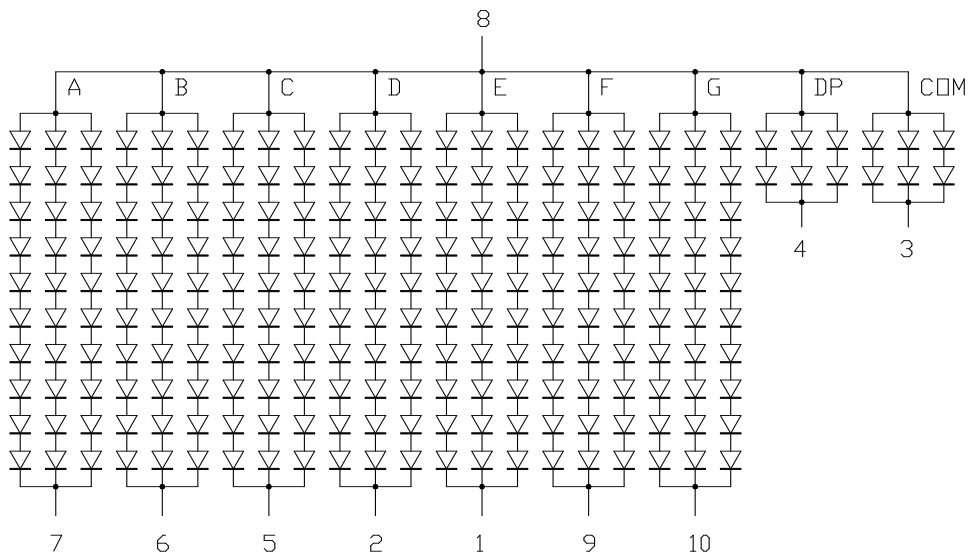
<b>PART NO.</b>	<b>DESCRIPTION</b>
AllnGaP Green	Common Anode
LTS-50801JG	

## PACKAGE DIMENSIONS



- NOTES: 1. All dimensions are in millimeters. Tolerance is  $\pm 0.25$ -mm (0.01") unless otherwise noted.  
 2. Pin tip's shift tolerance is  $\pm 0.4$  mm.

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

<b>No.</b>	<b>CONNECTION</b>
1	SEGMENT E CATHODE
2	SEGMENT D CATHODE
3	COMMA CATHODE
4	D.P. CATHODE
5	SEGMENT C CATHODE
6	SEGMENT B CATHODE
7	SEGMENT A CATHODE
8	COMMON ANODE
9	SEGMENT F CATHODE
10	SEGMENT G CATHODE

## ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	1400	mW
Peak Forward Current Per Segment ( 1/10 Duty Cycle, 0.1ms Pulse Width )	270	mA
Continuous Forward Current Per Segment Derating Linear From 25°C Per Segment	75	mA mA/°C
Reverse Voltage Per Segment	50	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260°C., or temperature of unit (during assembly) not over max. temperature rating above		

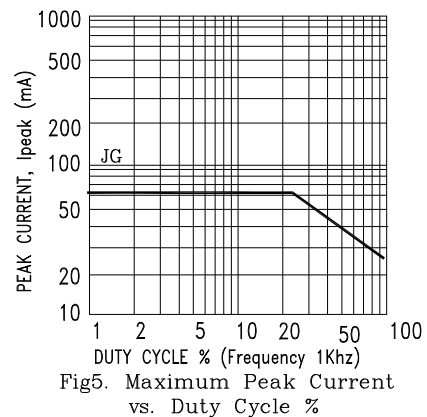
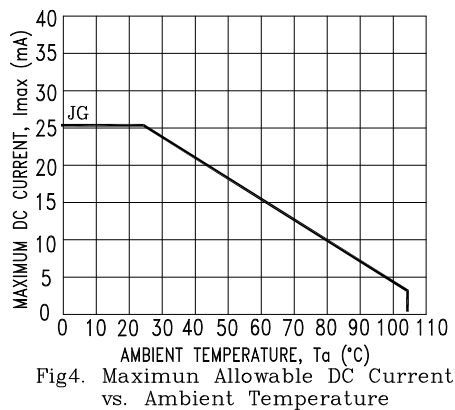
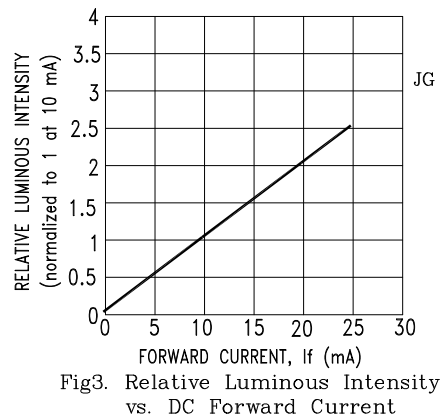
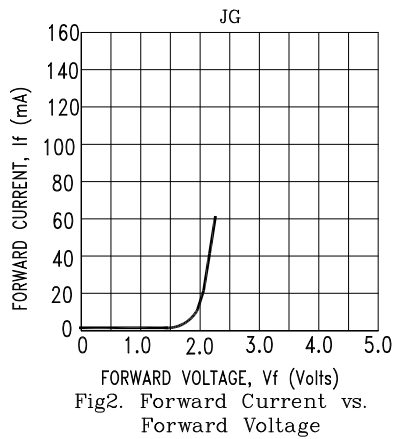
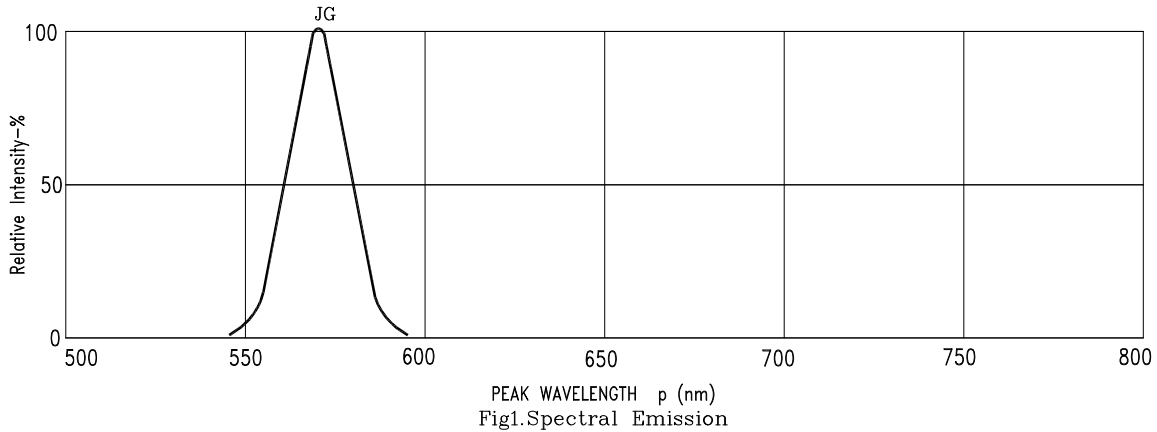
## ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>		99		mcd	I <sub>F</sub> =30mA
Peak Emission Wavelength	λ <sub>p</sub>		571		nm	I <sub>F</sub> =60mA
Spectral Line Half-Width	Δλ		15		nm	I <sub>F</sub> =60mA
Dominant Wavelength	λ <sub>d</sub>		572		nm	I <sub>F</sub> =60mA
Forward Voltage Per Segment	V <sub>F</sub>		20 (4)	26 (5.2)	V	I <sub>F</sub> =60mA
Reverse Current Per Segment	I <sub>R</sub>			300	μA	V <sub>R</sub> =50V
Luminous Intensity Matching Ratio (Similar Light Area)	I <sub>v-m</sub>			2:1		I <sub>F</sub> =30mA

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 : JG=AlInGaP Green