



Spec No. :DS30-2001-351 Effective Date: 07/02/2019

Revision: C

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LITE-ON Technology Corp. / Optoelectronics

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LED DISPLAY

LTS-3861JD

<u>Rev</u>	<u>Description</u>	<u>By</u>	<u>Date</u> (DD/MM/YY)				
01	Preliminary Spec	Meg Huang	07-05-2002				
Above data for PD and Customer tracking only							
-	NPPR Received and Upload on system	Meg Huang	07-05-2002				
Α	Add dimension and recommend PCB hole	Anon B.	09-05-2019				



1. Description

The LTS-3861JD is a 0.3-inch (7.62-mm) digit height single digit low current seven-segment display This device uses AllnGaP HYPER RED chips (AllnGaP epi on GaAs substrate). The display has a light gray Face and white segments.

1.1 Features

- 0.30 inch (7.62 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)

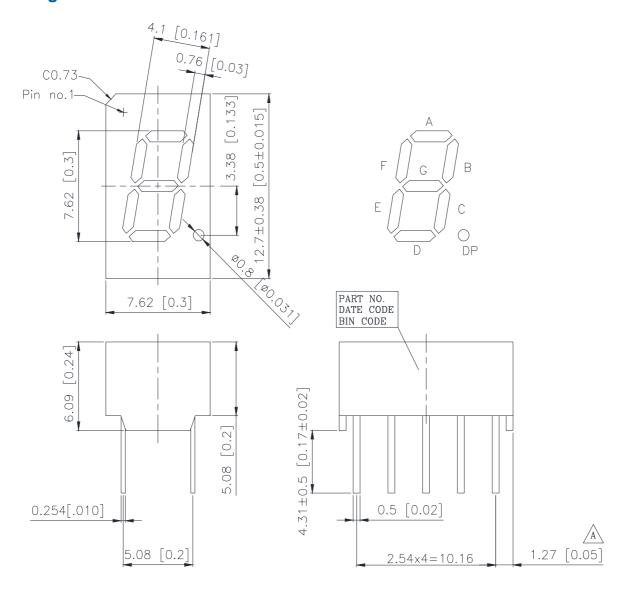
1.2 Device

Part No	Description		
AllnGaP HYPER RED	Common anode		
LTS-3861JD	Rt. Hand decimal		

Part No. : LTS-3861JD BNS-OD-FC002/A4



2. Package Dimensions

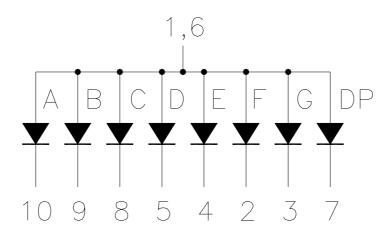


Notes:

- 1. All dimensions are in millimeters. Tolerances are \pm 0.25mm (0.01") unless otherwise noted.
- 2. Foreign materials on segment ≤10mils.
- Bubble in segment ≦10mils.
- Bending≦1% of reflector length.
- Ink contamination (surface) ≦20mils.
- 6. Pin tip's shift tolerance is \pm 0.40 mm.
- 7. Recommend the best pcb hole: diameter 1.10 mm



3. Internal Circuit Diagram



4. Pin Connection

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



5. Rating and Characteristics

5.1. Absolute Maximum Rating at Ta=25℃

Maximum Rating	Unit		
70	mW		
90	mA		
25	mA		
0.28	mA/℃		
-35℃ to +105℃			
-35℃ to +105℃			
	70 90 25 0.28 -35℃ to +105℃		

Solder Conditions: 1/16 inch below seating plane within 3 seconds at max 260℃ or temperature of unit (during assembly) not over max. temperature rating above.

5.2. Electrical / Optical Characteristics at Ta=25°C

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Test Condition
Average Luminous Intensity	IV	200	600		ucd	IF=1mA
Peak Emission Wavelength	λр		650		nm	IF=20mA
Spectral Line Half-Width	Δλ		20		nm	IF=20mA
Dominant Wavelength	λd		639		nm	IF=20mA
Forward Voltage Per Chip	VF		2.10	2.60	V	IF=20mA
Reverse Current Per Segment (*2)	IR			100	μΑ	VR=5V
Luminous Intensity Matching Ratio (Similar Light Area)	IV-m			2:1		IF=1mA

Notes:

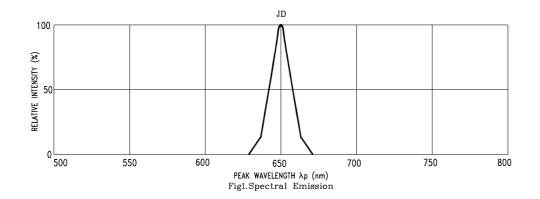
- 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission International De L'Eclariage) eye-response curve.
- 2. Reverse voltage is only for IR test. It cannot continue to operate at this situation.
- 3. Cross talk specification ≤ 2.5%.

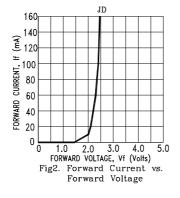
Part No.: LTS-3861JD BNS-OD-FC002/A4

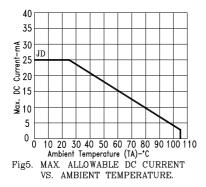


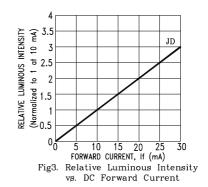
6. Typical Electrical / Optical Characteristics Curves

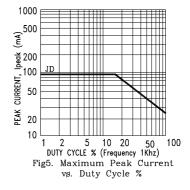
(25°C Ambient Temperature Unless Otherwise Noted)











NOTE : JD=AlInGaP HYPER RED