# Property of Lite-On Only

### **FEATURES**

- \*0.315 inch (8.0 mm) DIGIT HEIGHT
- \*CONTINUOUS UNIFORM SEGMENTS
- **\*LOW POWER REQUIREMENT**
- \*EXCELLENT CHARACTERS APPEARANCE
- \*CATEGORIZED FOR LUMINOUS INTENSITY
- \*LEAD FREE PACKAGE

### **DESCRIPTION**

The LTS-3867JD-H3J is a 0.315 inch (8.0 mm) digit height single digit seven-segment display. This device uses AlInGaP Hyer Red LED chips (AlInGaP epi on GaAs substrate). The display has a black face and white segments.

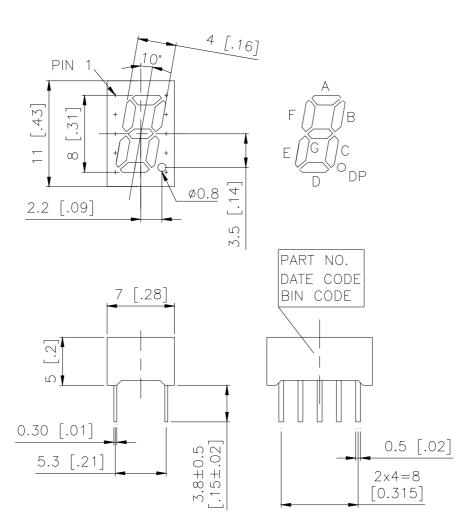
## **DEVICE**

PART NO.	DESCRIPTION		
AlInGaP HYPER RED	Common Anode		
LTS-3867JD-H3J	Rt. Hand Decimal		

PART NO.: LTS-3867JD-H3J PAGE: 1 of 5

Property of Lite-On Only

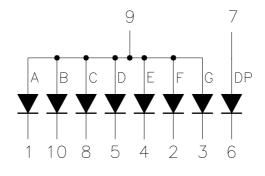
## PACKAGE DIMENSIONS



NOTES: 1. All dimensions are in millimeters. Tolerances are  $\pm$  0.25-mm (0.01") unless otherwise noted.

2. Pin tip's shift tolerance is +/- 0.4 mm.

# INTERNAL CIRCUIT DIAGRAM



PART NO.: LTS-3867JD-H3J PAGE: 2 of 5

Property of Lite-On Only

# **PIN CONNECTION**

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

PART NO.: LTS-3867JD-H3J PAGE: 3 of 5

Property of Lite-On Only

## ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT			
Power Dissipation Per Segment	70	mW			
Peak Forward Current Per Segment ( Frequency 1Khz, 10% duty cycle)	90	mA			
Continuous Forward Current Per Segment	25	mA			
Forward Current Derating from 25 <sup>o</sup> C	0.28	mA/ <sup>0</sup> C			
Reverse Voltage Per Segment	5	V			
Operating Temperature Range	$-35^{0}$ C to $+105^{0}$ C				
Storage Temperature Range	$-35^{0}$ C to $+105^{0}$ 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

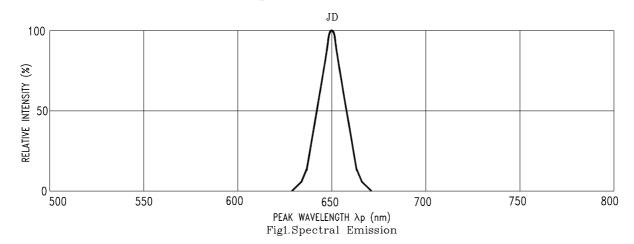
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	Iv	200	692		1	I <sub>F</sub> =1mA
		3400	9000		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λр		650		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		20		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λd		639		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	$V_{\mathrm{F}}$		2.1	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	Ir			100	μΑ	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio (Similar Light Area)	Iv-m			2:1		I <sub>F</sub> =1mA

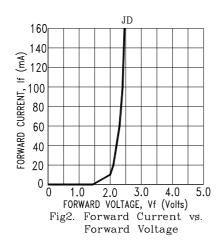
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclariage) eye-response curve.

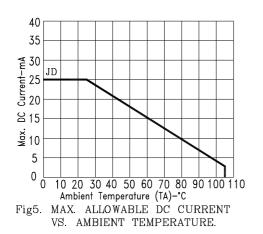
PART NO.: LTS-3867JD-H3J PAGE: 4 of 5

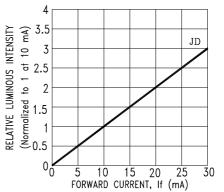
## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

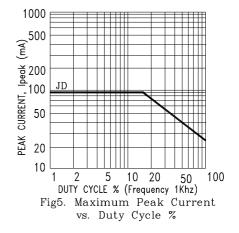








 $\begin{array}{cccc} Fig3. & Relative & Luminous & Intensity \\ & vs. & DC & Forward & Current \end{array}$ 



NOTE : JD=AlInGaP HYPER RED

PART NO.: LTS-3867JD-H3J PAGE: 5 of 5