



**Spec No.: DS30-2000-158**Effective Date: 05/07/2002

Revision: A

**LITE-ON DCC** 

**RELEASE** 

BNS-OD-FC001/A4

# LITEON

# LITE-ON ELECTRONICS, INC.

## Property of Lite-On Only

### **FEATURES**

- \*0.3 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.

### **DESCRIPTION**

The LTS-3361JS is a 0.3inch (7.62mm) height digit display. The device utilizes AlInGaP yellow LED chips which are made from AlInGaP on a non-transparent GaAs substrate, and have gray face and white segments.

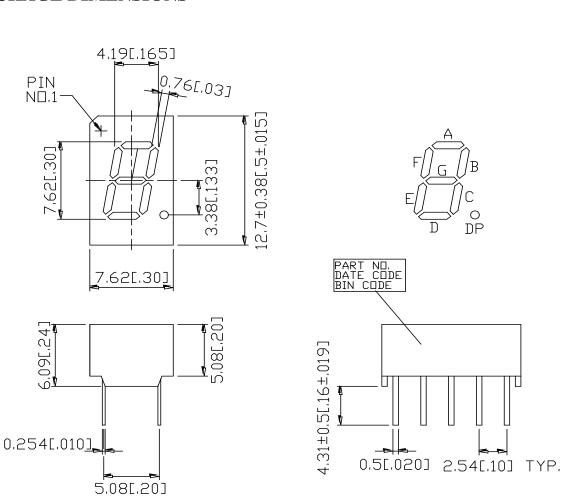
### **DEVICE**

PART NO.	DESCRIPTION			
AlInGaP YELLOW	COMMON CATHODE			
LTS-3361JS	RT. HANDE DECIMAL			

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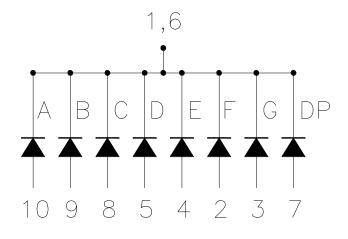
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### **PACKAGE DIMENSIONS**



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

## INTERNAL CIRCUIT DIAGRAM



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## PIN CONNECTION

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

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## ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT			
Power Dissipation Per Segment	40	mW			
Peak Forward Current Per Segment ( 1/10 Duty Cycle, 0.1ms Pulse Width )	60	mA			
Continuous Forward Current Per Segment	25	mA			
Derating Linear From 25°C Per Segment	0.33	mA/°C			
Reverse Voltage Per Segment	5	V			
Operating Temperature Range	-35°C to +85°C				
Storage Temperature Range	-35°C to +85°C				
Solder Temperature: max 260°C for max 3sec at 1.6mm[1/16inch] below seating plane.					

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

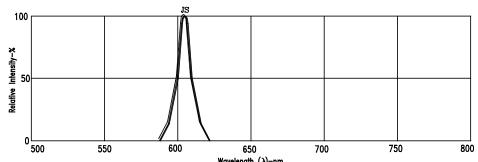
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	200	600		μcd	I <sub>F</sub> =1mA
Peak Emission Wavelength	λр		588		nm	IF=20mA
Spectral Line Half-Width	Δλ		15		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λd		587		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	VF		2.05	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	Ir			100	μΑ	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio	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'Eclairage) eye-response curve.

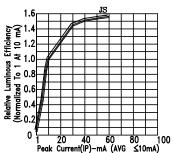
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## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

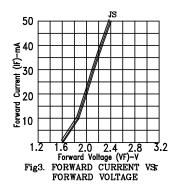
(25°C Ambient Temperature Unless Otherwise Noted)

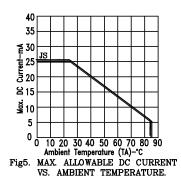


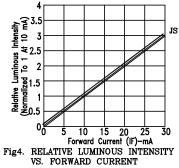
Wavelength (\(\lambda\right)\)-nm.
Fig1. RELATIVE INTENSITY VS. WAVELENGTH



0 1 20 40 60 80 100 Peak Current(IP)-mA (AVG ≤10mA) Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT







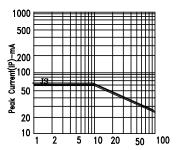


Fig6. MAX. PEAK CURRENT VS.
DUTY CYCLE %
(REFRESH RATE 1KHz)

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