Property of Lite-On Only

FEATURES

- *0.3 inch (7.62 mm) DIGIT HEIGHT
- ***EXCELLENT SEGMENT UNIFORMITY**
- ***LOW POWER REQUIREMENT**
- *HIGH BRIGHTNESS AND HIGH CONTRAST
- *WIDE VIEWING ANGLE
- *** SOLID STATE RELIABILITY**
- *BINNED FOR LUMINOUS INTENSITY

DESCRIPTION

The LSHD-A101 is a 0.3 inch (7.62 mm) digit height single-digit display. This device uses AS-AlInGaP RED LED chips (AlInGaP epi on GaAs substrate). The display has light gray face and white segments.

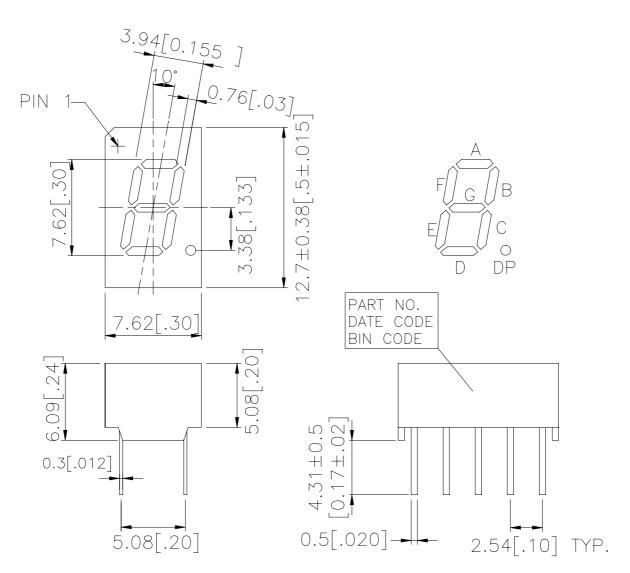
DEVICE

PART NO.	DESCRIPTION			
AlInGaP RED	Common Anode			
LSHD-A101	Rt. Hande Decimal			

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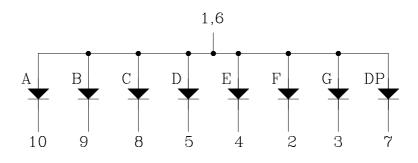
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PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



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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			

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ABSOLUTE MAXIMUM RATING AT $Ta = 25^{\circ}C$

PARAMETER	MAXIMUM RATING	UNIT				
Power Dissipation Per Segment	70	mW				
Peak Forward Current Per Segment (Frequency 1Khz, 15% duty cycle)	90	mA				
Continuous Forward Current Per Segment	25	mA				
Forward Current Derating from 25 ^o C	0.28	mA/ ⁰ C				
Reverse Voltage Per Segment	5	V				
Operating Temperature Range	-35° C to $+105^{\circ}$ C					
Storage Temperature Range -35°C to +105°C						
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260°C						

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25°C

PARAMETER	SYMBOL	MIN	ТҮР	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	Iv	200	692		μcd	$I_F = 1 \text{mA}$
		3400	9000			$I_F = 10 \text{mA}$
Peak Emission Wavelength	λр		650		nm	$I_F = 20 \text{mA}$
Spectral Line Half-Width	Δλ		20		nm	$I_F = 20 \text{mA}$
Dominant Wavelength	λd		639		nm	$I_F = 20 \text{mA}$
Forward Voltage Per Segment	$V_{\rm F}$		2.1	2.6	V	$I_F = 20 \text{mA}$
Reverse Current Per Segment	Ir			100	μΑ	$V_R = 5V$
Luminous Intensity Matching Ratio	Iv-m			2:1		$I_F = 1mA$

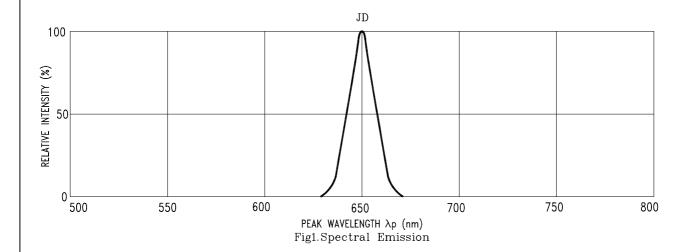
Note: Luminous Intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

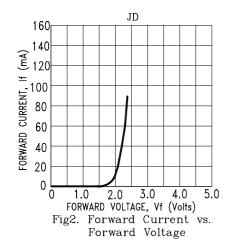
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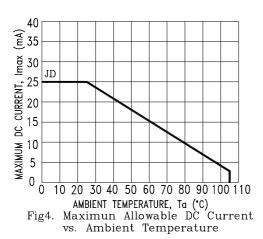
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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)







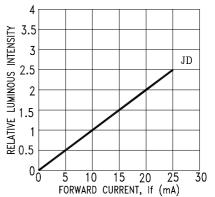
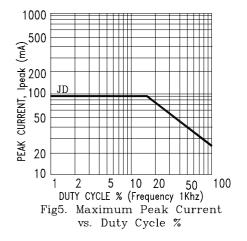


Fig3. Relative Luminous Intensity vs. DC Forward Current



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