

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Spec No.: DS30-2002-145 Effective Date: 01/14/2003

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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-7501 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.

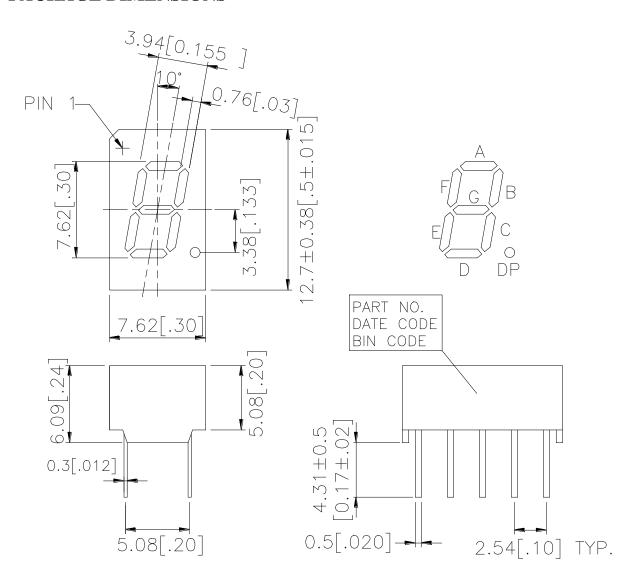
DEVICE

PART NO.	DESCRIPTION		
AlInGaP RED	Common Anode		
LSHD-7501	Rt. Hande Decimal		

PAGE: 1 of 5 PART NO.: LSHD-7501

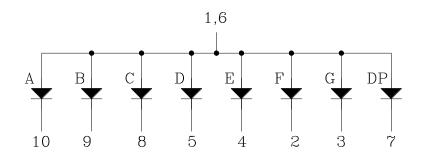
Property of Lite-On Only

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PART NO.: LSHD-7501 PAGE: 2 of 5

Property of Lite-On Only

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				

PART NO.: LSHD-7501 PAGE: 3 of 5

Property of Lite-On Only

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

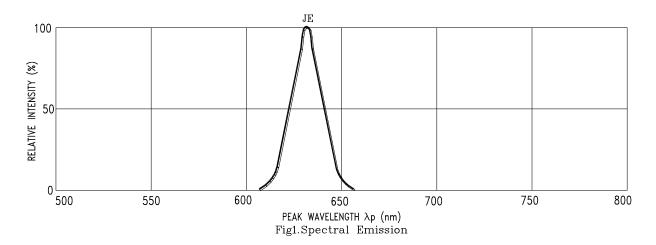
PARAMETER	SYMBOL	MIN	ТҮР	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	Iv	320	923		μcd	$I_F = 1 \text{mA}$
		5400	12000			$I_F = 10 \text{mA}$
Peak Emission Wavelength	λр		632		nm	$I_F = 20 \text{mA}$
Spectral Line Half-Width	Δλ		20		nm	$I_F = 20 \text{mA}$
Dominant Wavelength	λd		624		nm	$I_F = 20 \text{mA}$
Forward Voltage Per Segment	V_{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		$I_F = 1 \text{mA}$

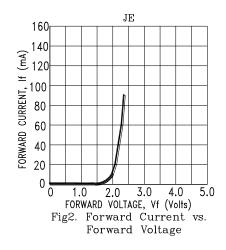
Note: Luminous Intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

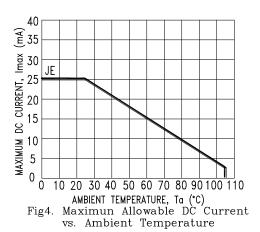
PART NO.: LSHD-7501 PAGE: 4 of 5

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)







NOTE : JE=AlInGaP RED

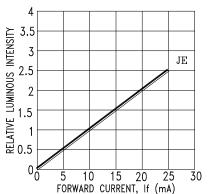
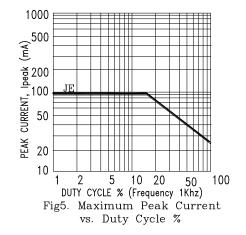


Fig3. Relative Luminous Intensity vs. DC Forward Current



PART NO.: LSHD-7501 PAGE: 5 of 5