



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



BNS-OD-FC001/A4

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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

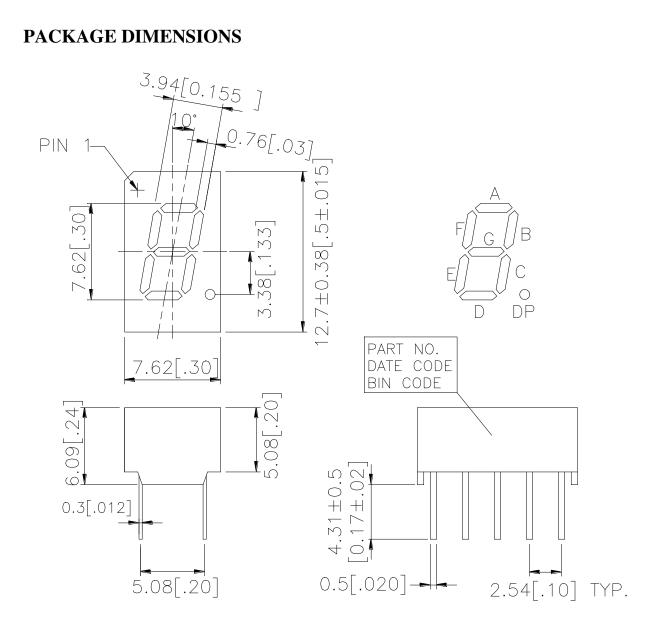
DESCRIPTION

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

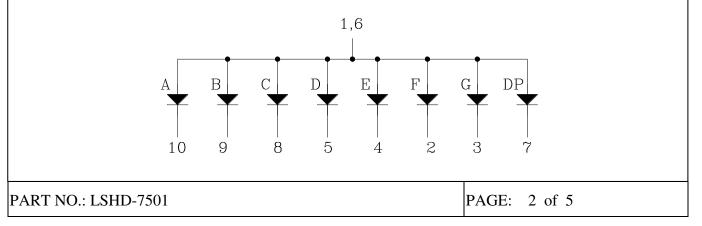
PART NO.	DESCRIPTION
AlInGaP RED	Common Anode
LSHD-7501	Rt. Hande Decimal

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

INTERNAL CIRCUIT DIAGRAM



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

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 ⁰ 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 $+105^{\circ}$ 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	320	923		μcd	$I_F = 1 m A$
		5400	12000			IF = 10mA
Peak Emission Wavelength	λp		632		nm	IF = 20mA
Spectral Line Half-Width	Δλ		20		nm	IF = 20mA
Dominant Wavelength	λd		624		nm	IF = 20mA
Forward Voltage Per Segment	VF		2.1	2.6	V	IF = 20mA
Reverse Current Per Segment	Ir			100	μA	$V_R = 5V$
Luminous Intensity Matching Ratio	Iv-m			2:1		$I_F = 1 m A$

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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