



Spec No.: DS-30-98-249 Effective Date: 04/21/2000 Revision: -



BNS-OD-FC001/A4

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# **LITEON** LITE-ON ELECTRONICS, INC.

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### **FEATURES**

\* 5-INCH (127.0-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-50801G is a 5-inch (127.0-mm) digit height single digit seven-segment display. This device utilizes green LED chips, which are made from GaP on GaP substrate, and has a black face and green segments.

#### DEVICE

PART NO.	DESCRIPTION		
GREEN			
LTS-50801G	Common Anode		

PART	NO.:	LTS	-508010	£
1 1 11 1	110	LID	500010	-

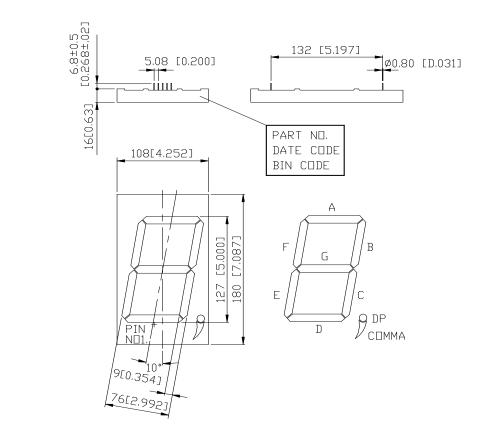
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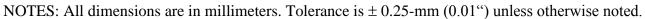


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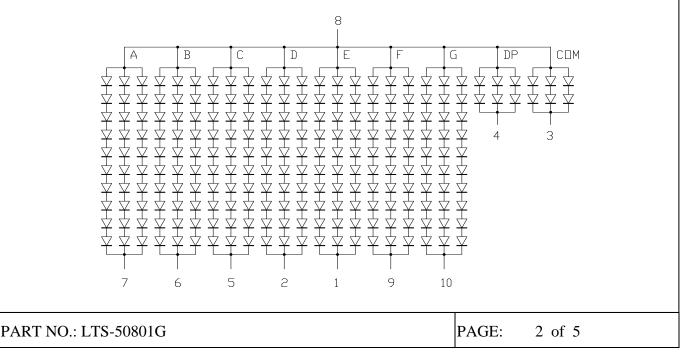
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### **PACKAGE DIMENSIONS**





# INTERNAL CIRCUIT DIAGRAM





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## **PIN CONNECTION**

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

PART NO.: LTS-50801G

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# ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT		
Power Dissipation Per Segment	1200	mW		
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	180	mA		
Continuous Forward Current Per Segment	60	mA		
Derating Linear From 25 <sup>0</sup> C Per Segment	0.72	mA/ <sup>0</sup> C		
Reverse Voltage Per Segment	50	V		
Operating Temperature Range	$-35^{\circ}$ C to $+85^{\circ}$ C			
Storage Temperature Range $-35^{\circ}C$ to $+85^{\circ}C$				
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260 <sup>0</sup> C				

# ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	21	60		mcd	IF=30mA
Peak Emission Wavelength	λp		565		nm	IF=20mA
Spectral Line Half-Width	Δλ		30		nm	IF=20mA
Dominant Wavelength	λd		569		nm	IF=20mA
Forward Voltage Per Segment	VF		21 (4.2)	26 (5.2)	V	IF=60mA
Reverse Current Per Segment	Ir			300	μΑ	V <sub>R</sub> =50V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF=10mA

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

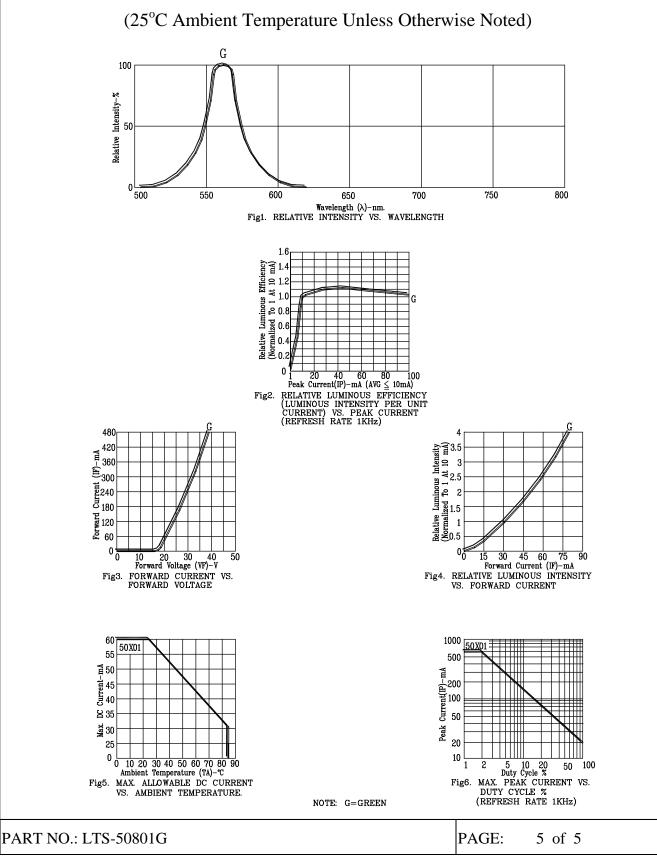
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# **TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES**



# **Mouser Electronics**

Authorized Distributor

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Lite-On: LTS-50801G