## Property of Lite-on Only

#### **FEATURES**

- \*0.28-inch (7.0-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-2801AE is a 0.28-inch (7.0-mm) digit height single digit seven-segment display. This device utilizes red orange LED chips, which are made from GaAsP on a transparent GaP substrate, and has a gray face and white segments.

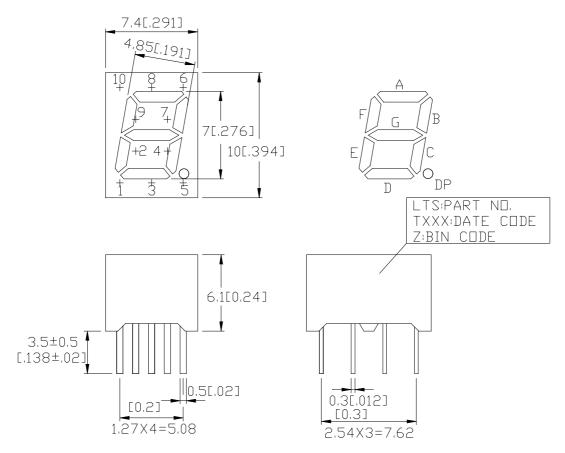
#### **DEVICE**

PART NO.	DESCRIPTION			
RED ORANGE	Common Anode			
LTS-2801AE	Rt. Hand Decimal			

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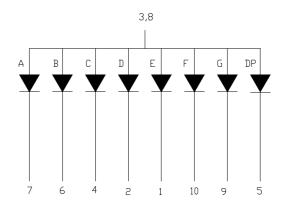
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#### PACKAGE DIMENSIONS



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

#### INTERNAL CIRCUIT DIAGRAM



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### **PIN CONNECTION**

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

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## ABSOLUTE MAXIMUM RATING AT T<sub>A</sub>=25°C

PARAMETER	MAXIMUM RATING	UNIT			
Power Dissipation Per Segment	75	mW			
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	100	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 below seating plane.					

### ELECTRICAL / OPTICAL CHARACTERISTICS AT T<sub>A</sub>=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	800	2000		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λр		630		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		40		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λd		621		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	VF		2.0	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> =10mA

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

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**Proper** Lite-on Only

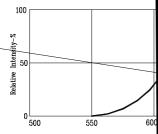
### TYPICAL ELECTRICAL / OF L CHARACTERISTIC CURVES

(25°C Ambient Tempera

nless Otherwise Noted)

750

800



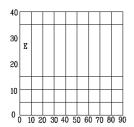
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Relative Luminous Efficiency (Normalized To 1 At 10 mA)

Fig2.

ma (AVG ≤ 10mA) NOUS EFFICIENCY ENSITY PER UNIT PEAK CURRENT

50 700 th (A)-nm. SITY VS. WAVELENGTH



D ORANGE

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