### Property of Lite-on Only

### **FEATURES**

- \*0.56 INCH (14.22 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-5501AE is a 0.56 inch (14.22 mm) digit height single digit display. This device utilizes red orange LED chips which are made from GaAsP on GaP substrate, and has a gray face and white segments.

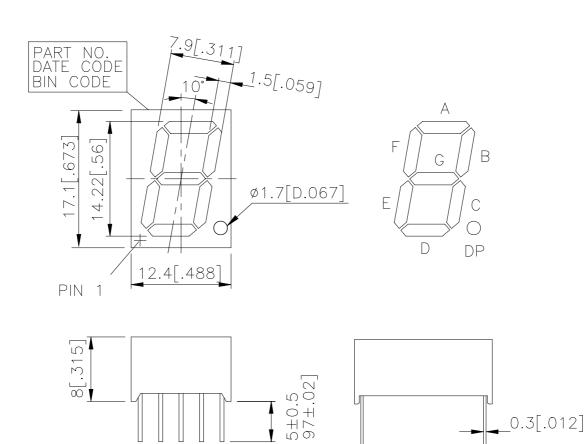
#### **DEVICE**

PART NO.	DESCRIPTION				
RED ORANGE	COMMON ANODE				
LTS-5501AE	RT. HAND DECIMAL				

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### **PACKAGE DIMENSIONS**

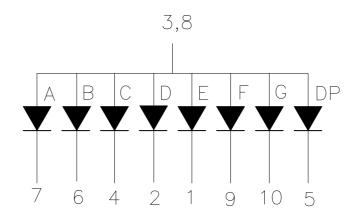


NOTES: All dimensions are in millimeters. Tolerance:± 0.25-mm (0.01") unless otherwise noted.

2.54[.10] 0.5[.02]

15.24[.60]

### 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 F
10	CATHODE G

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### ABSOLUTE MAXIMUM RATING AT Ta=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 <sup>0</sup> C Per Segment	0.33	mA/ <sup>0</sup> C			
Reverse Voltage Per Segment	5	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>o</sup> C					

### ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	800	2400		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

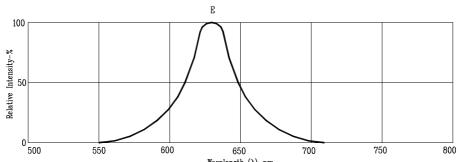
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclariage) eye-response curve.

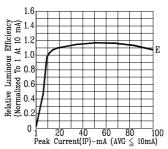
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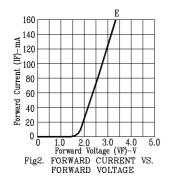
### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

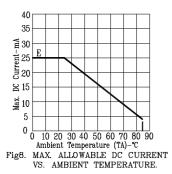
(25°C Ambient Temperature Unless Otherwise Noted)



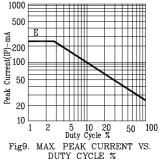


0 1 20 40 60 80 100
Peak Current(IP)-mA (AVG \( \) 10mA)
RELATIVE LUMINOUS EFFICIENCY
(LUMINOUS INTENSITY PER UNIT
CURRENT) VS. PEAK CURRENT
(REFRESH RATE 1KHZ) Fig4.





₹3.5 Forward Current (IF)-mA
Fig3. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



(REFRESH RATE 1KHz)

NOTE: E=RED ORANGE

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LITEON:

LTS-5501AE