

**FEATURES**

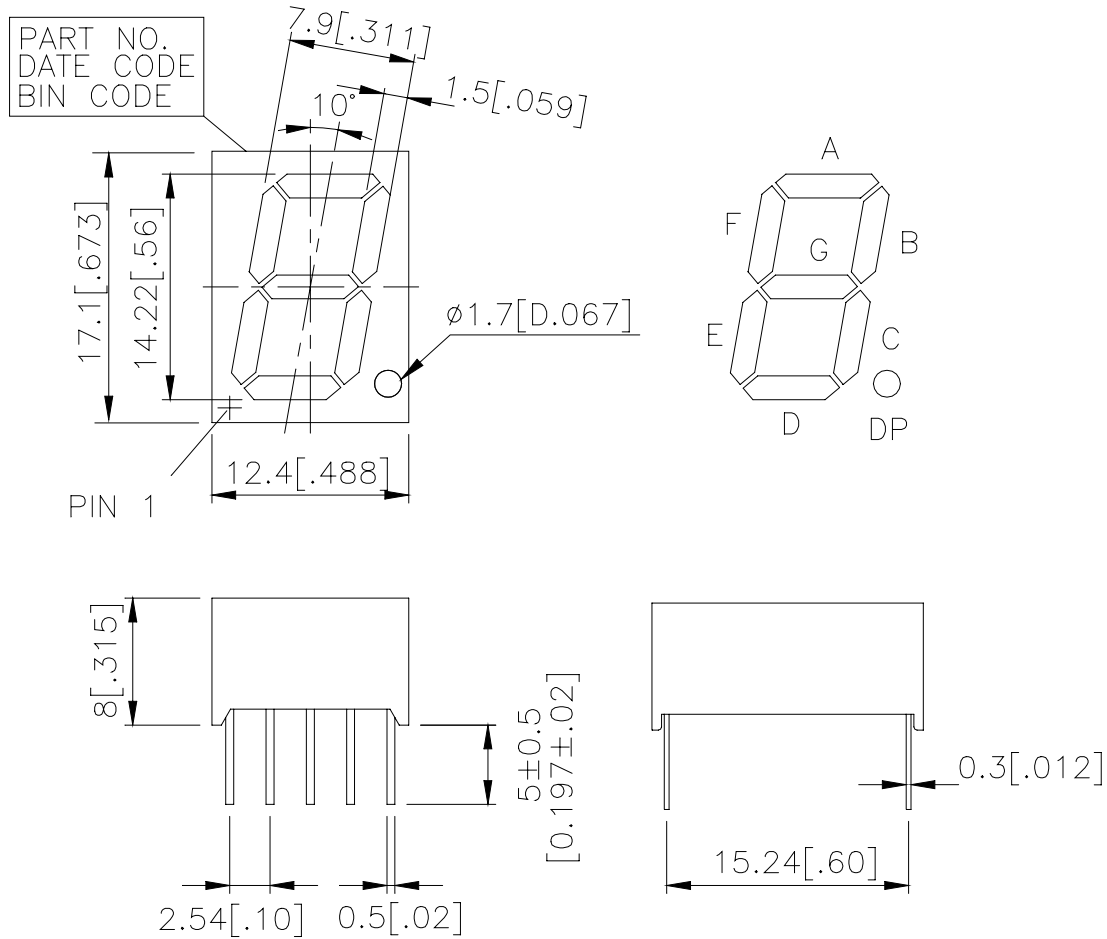
- ☐ 0.56 INCH (14.22 mm) DIGIT HEIGHT.
- ☐ CONTINUOUS UNIFORM SEGMENTS.
- ☐ LOW POWER REQUIREMENT.
- ☐ EXCELLENT CHARACTERS APPEARANCE.
- ☐ HIGH BRIGHTNESS & HIGH CONTRAST.
- ☐ WIDE VIEWING ANGLE.
- ☐ SOLID STATE RELIABILITY.
- ☐ CATEGORIZED FOR LUMINOUS INTENSITY.

**DESCRIPTION**

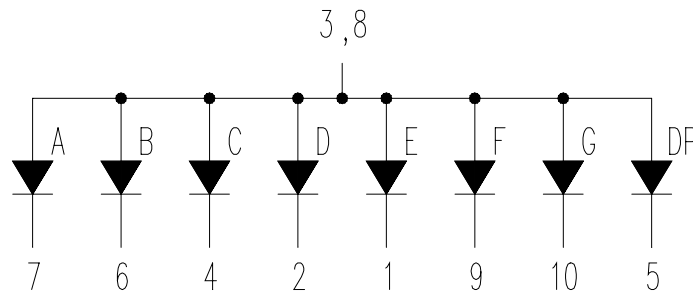
The LTS-5501AB is a 0.56 inch (14.22 mm) digit height single digit display. This device utilizes blue LED chips which are made from GaN on a SiC substrate, and has a gray face and white segments.

**DEVICE**

PART NO.	DESCRIPTION
BLUE	COMMON ANODE RT. HAND DECIMAL
LTS-5501AB	

**PACKAGE DIMENSIONS**


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

**INTERNAL CIRCUIT DIAGRAM**


**PIN CONNECTION**

<b>No.</b>	<b>CONNECTION</b>
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

**ABSOLUTE MAXIMUM RATING AT Ta=25°C**

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	115	mW
Peak Forward Current Per Segment ( 1/10 Duty Cycle, 0.1ms Pulse Width )	60	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 <sup>0</sup> C to +85 <sup>0</sup> C	
Storage Temperature Range	-35 <sup>0</sup> C to +85 <sup>0</sup> 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	I <sub>v</sub>	1300	4300		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		428		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		65		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		466		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	V <sub>F</sub>		3.8	4.5	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio	I <sub>v</sub> -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'Eclairage) eye-response curve.

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

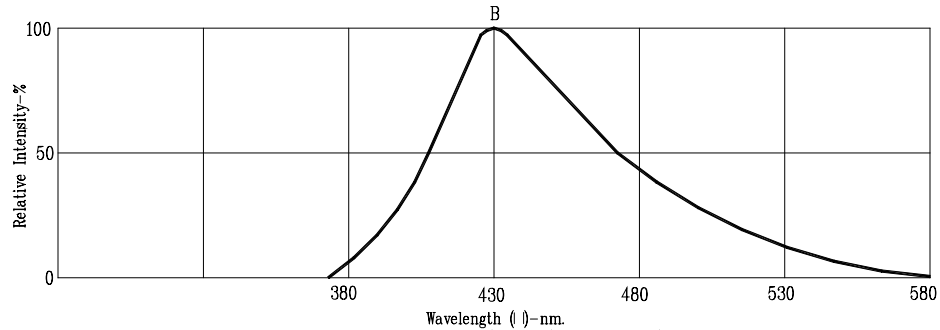


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

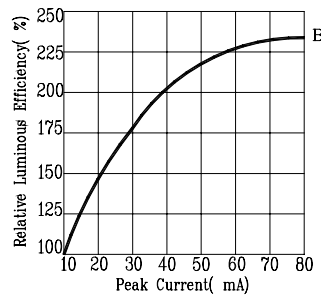


Fig2. RELATIVE LUMINOUS EFFICIENCY  
VS. PEAK FORWARD CURRENT  
(250us pulse width; 2ms period)

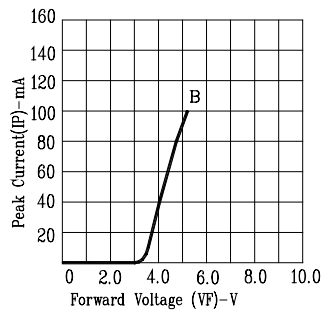


Fig3. FORWARD CURRENT VS.  
FORWARD VOLTAGE

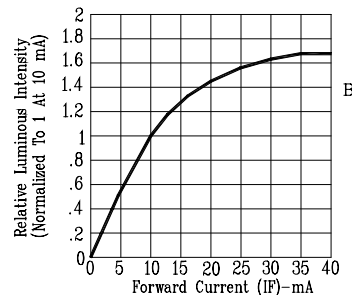


Fig4. RELATIVE LUMINOUS INTENSITY  
VS. FORWARD CURRENT

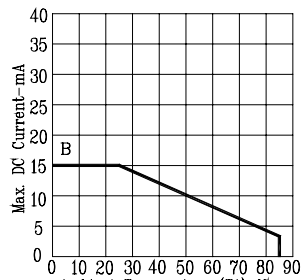


Fig5. MAX. ALLOWABLE DC CURRENT  
VS. AMBIENT TEMPERATURE.

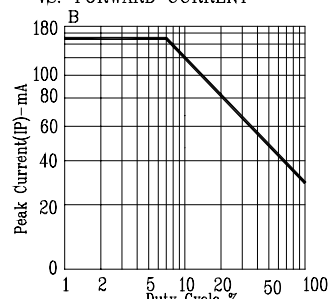


Fig6. MAX. PEAK CURRENT VS.  
DUTY CYCLE %  
(REFRESH RATE 1KHz)