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.

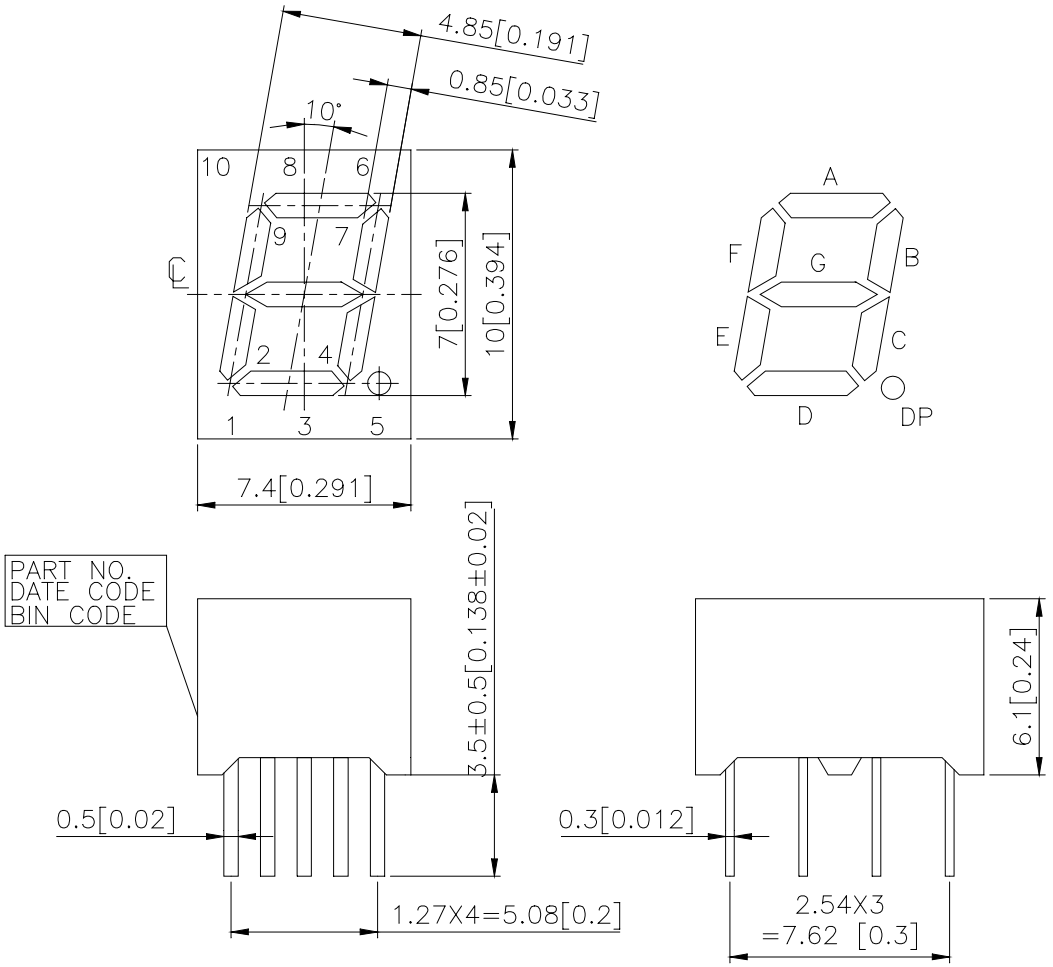
DESCRIPTION

The LTS-2801AB is a 0.28-inch (7.0-mm) digit height single digit seven-segment 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

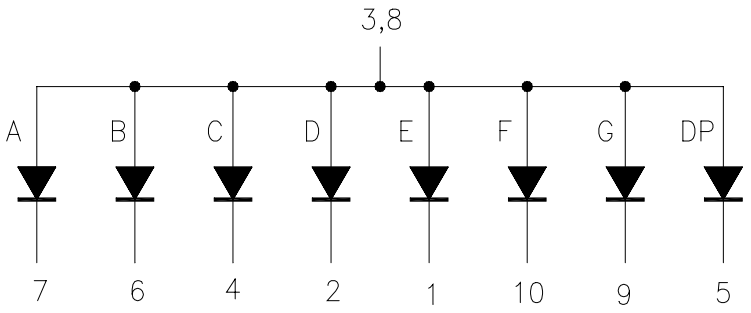
PART NO.	DESCRIPTION
BLUE	Common Anode
LTS-2801AB	Rt. Hand Decimal

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



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

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 Derating Linear From 25□ Per Segment	25 0.33	mA mA/□
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35□ to +85□	
Storage Temperature Range	-35□ to +85□	
Solder Temperature: max 260□ for max 3sec at 1.6mm below seating plane.		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	1000	3000		μcd	I_F=10mA
Peak Emission Wavelength	λp		428		nm	I_F=20mA
Spectral Line Half-Width	Δλ		65		nm	I_F=20mA
Dominant Wavelength	λd		466		nm	I_F=20mA
Forward Voltage Per Segment	V_F		3.8	4.5	V	I_F=20mA
Reverse Current Per Segment	I_R			100	μA	V_R=5V
Luminous Intensity Matching Ratio	I_V-m			2:1		I_F=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.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

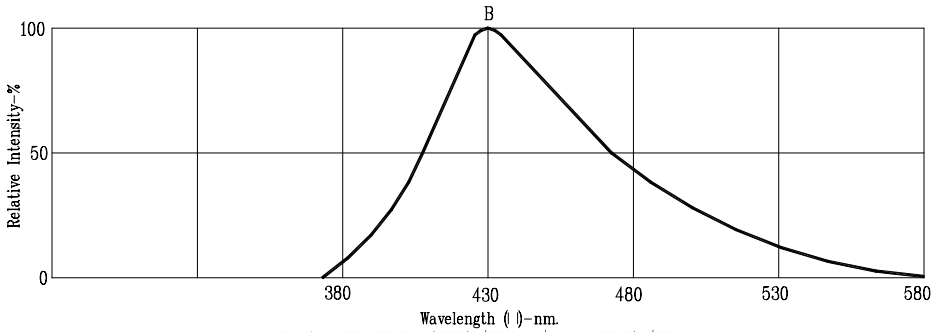


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

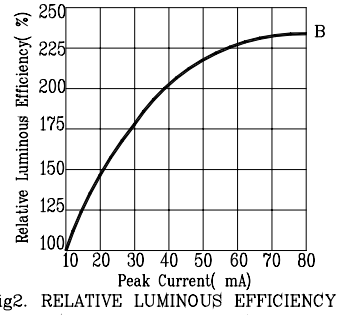


Fig2. RELATIVE LUMINOUS EFFICIENCY VS. PEAK FORWARD CURRENT
(250us pulse width; 2ms period)

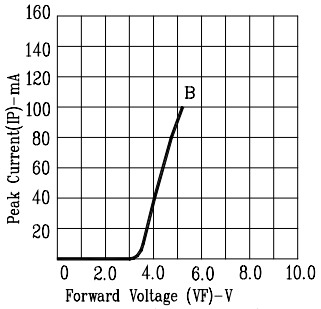


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

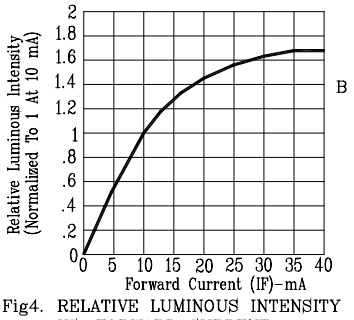


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

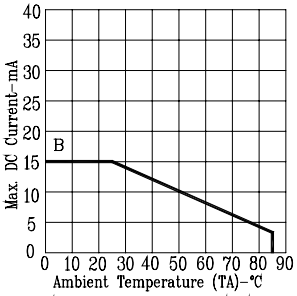


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

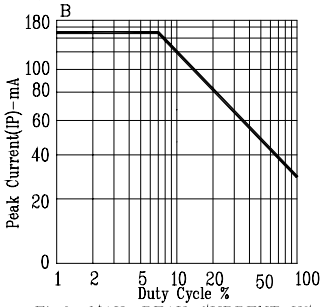


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE 1KHz)