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

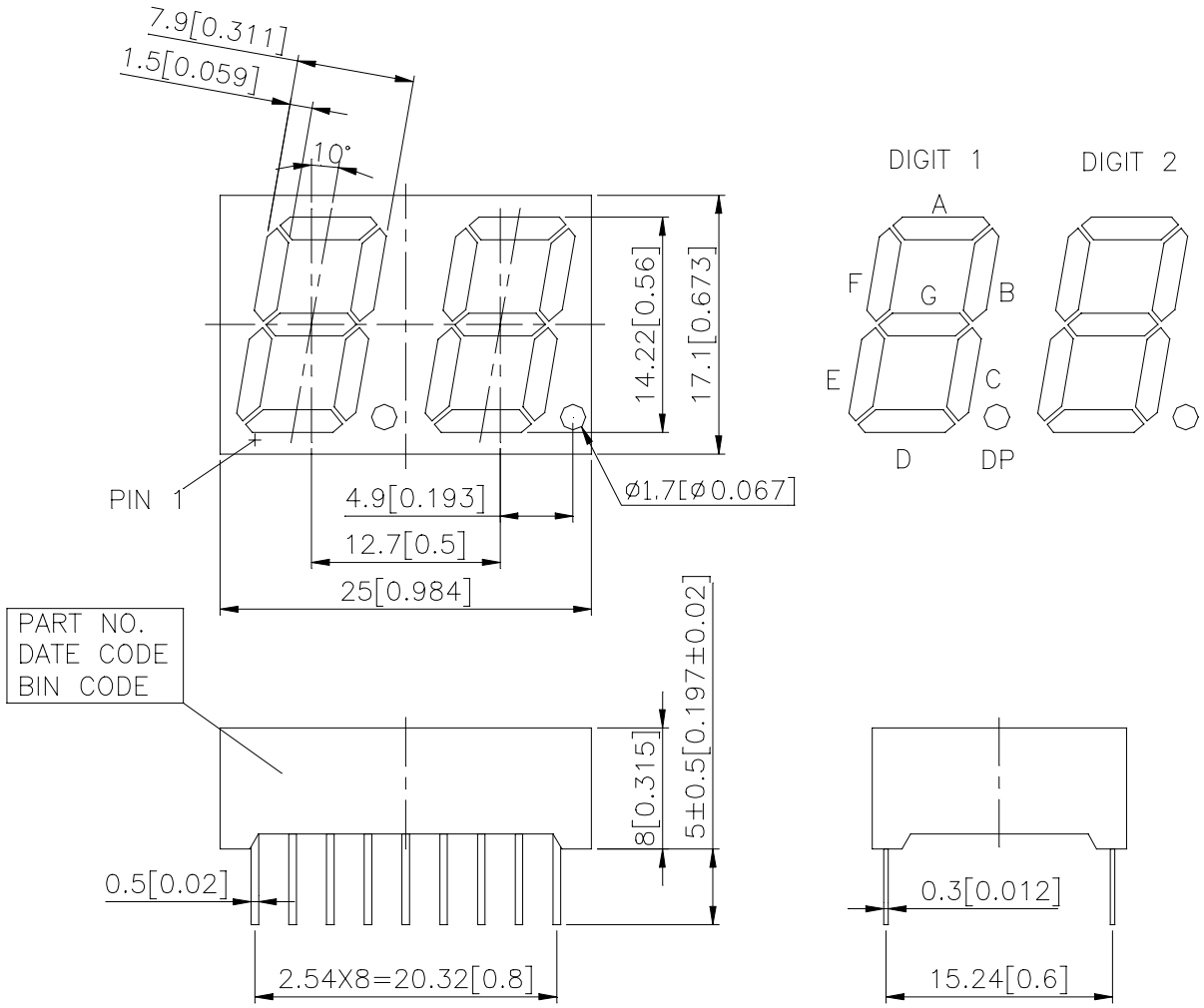
DESCRIPTION

The LTD-5523AB is a 0.56 inch (14.22 mm) digit height dual digit seven-segment display. The device utilizes blue chips, which are made from GaN on a SiC substrate, and has a gray face and white segments.

DEVICE

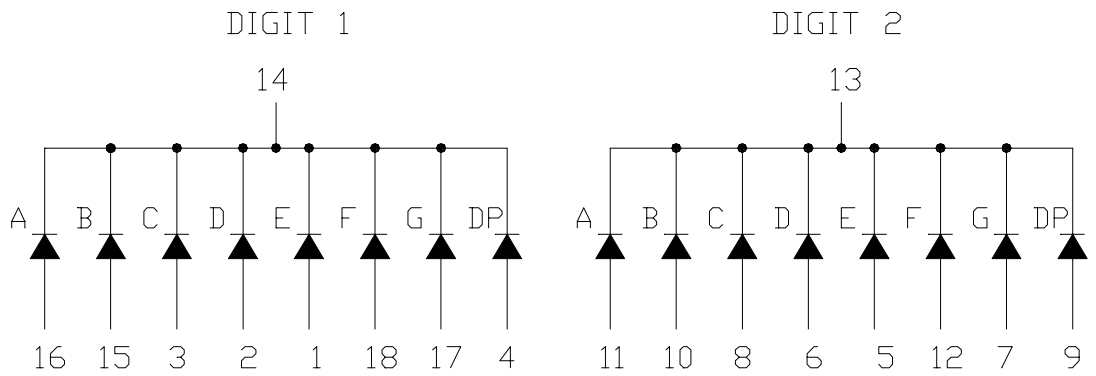
PART NO	DESCRIPTION
BLUE	COMMON CATHODE
LTD-5523AB	RT. HAND DECIMAL

PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are ± 0.25 mm unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
1	ANODE E (DIGIT 1)
2	ANODE D (DIGIT 1)
3	ANODE C (DIGIT 1)
4	ANODE DP (DIGIT 1)
5	ANODE E (DIGIT 2)
6	ANODE D (DIGIT 2)
7	ANODE G (DIGIT 2)
8	ANODE C (DIGIT 2)
9	ANODE DP (DIGIT 2)
10	ANODE B (DIGIT 2)
11	ANODE A (DIGIT 2)
12	ANODE F (DIGIT 2)
13	COMMON CATHODE (DIGIT 2)
14	COMMON CATHODE (DIGIT 1)
15	ANODE B (DIGIT 1)
16	ANODE A (DIGIT 1)
17	ANODE G (DIGIT 1)
18	ANODE F (DIGIT 1)

ABSOLUTE MAXIMUM RATING AT Ta=25℃

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	95	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	60	mA
Continuous Forward Current Per Segment Derating Linear From 25^0C Per Segment	25 0.33	mA mA/^{0}C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35^{0}C to +85^{0}C	
Storage Temperature Range	-35^{0}C to +85^{0}C	
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260^{0}C		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25^{o}C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	1300	4300		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'Eclairage) eye-response curve.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

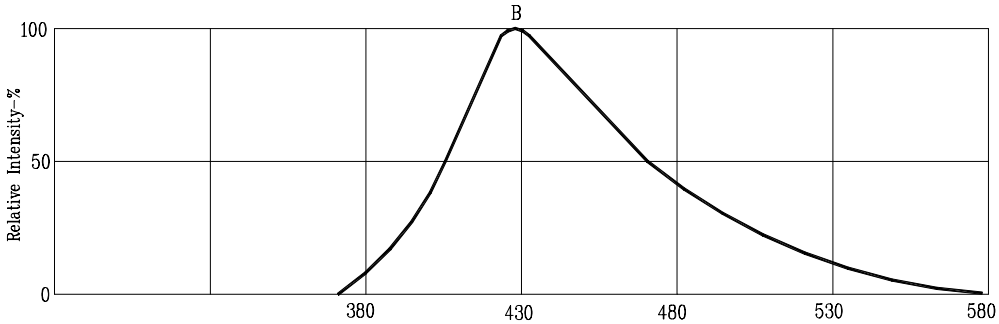


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

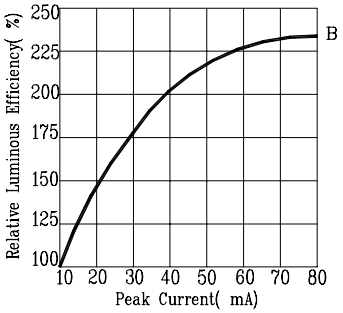


Fig2. RELATIVE LUMINOUS EFFICIENCY VS. PEAK FORWARD CURRENT (250us pulse width; 2ms period)

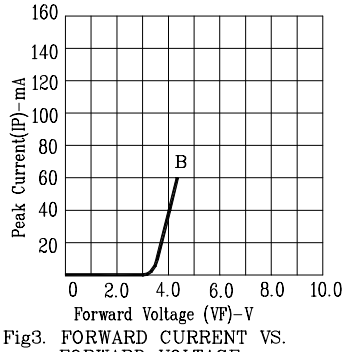


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

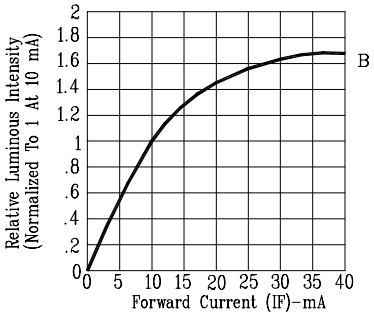


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

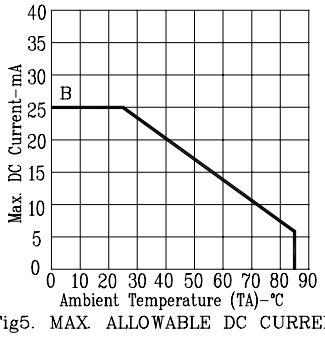


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

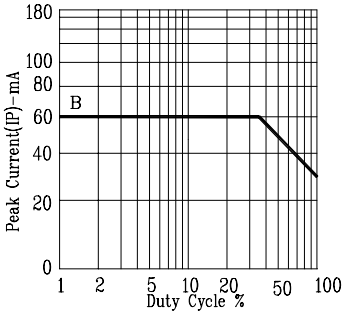


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)