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

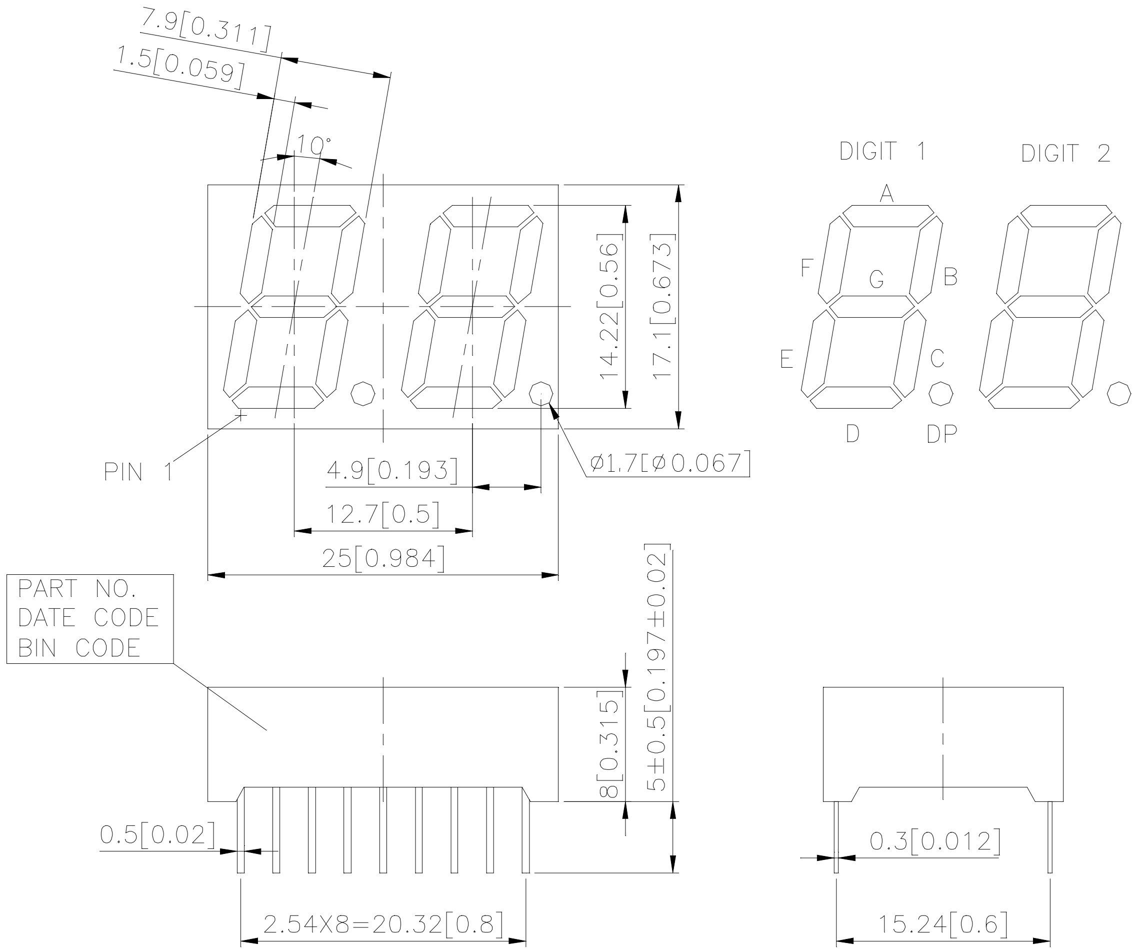
DESCRIPTION

The LTD-5521AE is a 0.56 inch (14.22 mm) digit height dual digit seven-segment display. The device utilizes red orange chips, which are made from GaAsP on a transparent GaP substrate, and has a gray face and white segments.

DEVICE

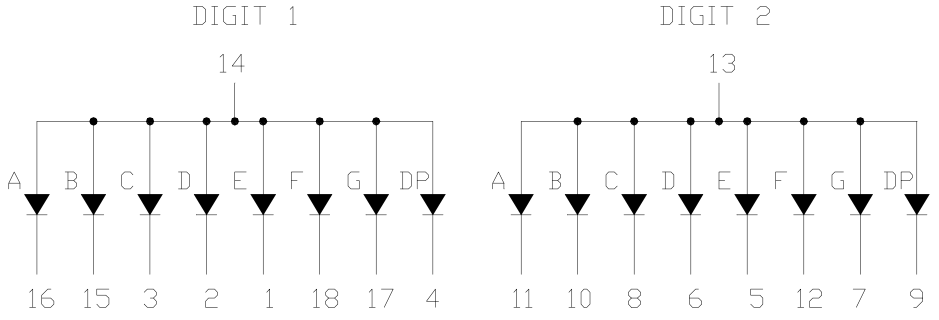
PART NO	DESCRIPTION
Red Orange	COMMON ANODE RT. HAND DECIMAL
LTD-5521AE	

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

ABSOLUTE MAXIMUM RATING AT T_A=25℃

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Chip	75	mW
Peak Forward Current Per Chip (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current Per Chip Derating Linear From 25℃ Per Chip	25 0.33	mA mA/℃
Reverse Voltage Per Chip	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		

TRICAL / OPTICAL CHARACTERISTICS AT T_A=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	800	2400		μcd	I_F=10mA
Peak Emission Wavelength	λp		630		nm	I_F=20mA
Spectral Line Half-Width	Δλ		40		nm	I_F=20mA
Dominant Wavelength	λd		621		nm	I_F=20mA
Forward Voltage Per Chip	V_F		2	2.6	V	I_F=20mA
Reverse Current Per Chip	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)

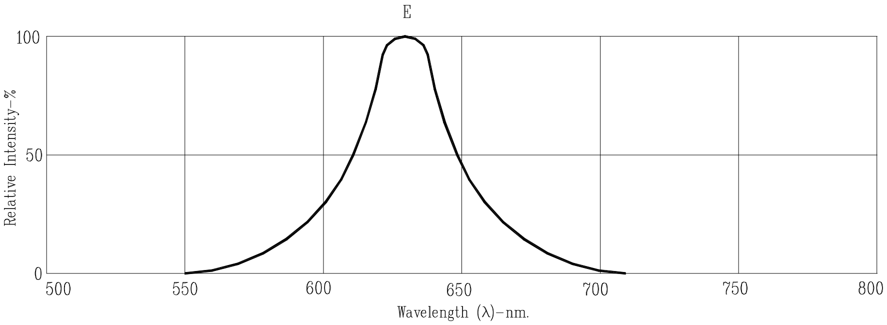


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

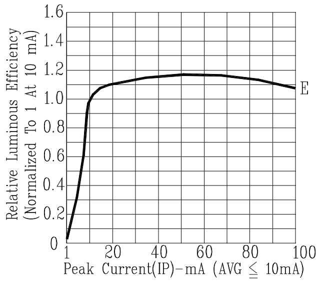


Fig2. RELATIVE LUMINOUS EFFICIENCY
(LUMINOUS INTENSITY PER UNIT
CURRENT) VS. PEAK CURRENT
(REFRESH RATE 1KHz)

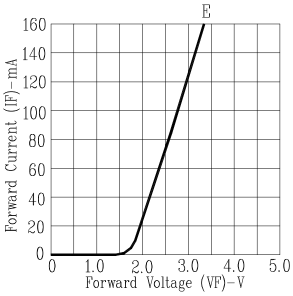


Fig3. FORWARD CURRENT VS.
FORWARD VOLTAGE

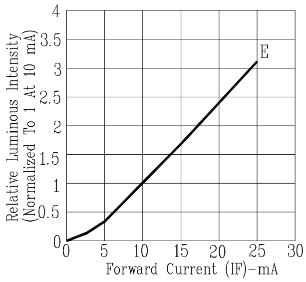


Fig4. RELATIVE LUMINOUS INTENSITY
VS. FORWARD CURRENT

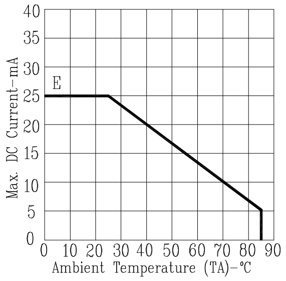


Fig5. MAX. ALLOWABLE DC CURRENT
VS. AMBIENT TEMPERATURE.

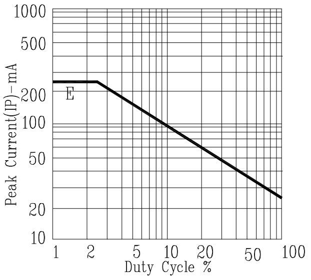


Fig6. MAX. PEAK CURRENT VS.
DUTY CYCLE %
(REFRESH RATE 1KHz)

NOTE: E=RED ORANGE