

## **FEATURES**

- \* 0.56INCH (14.22mm) 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

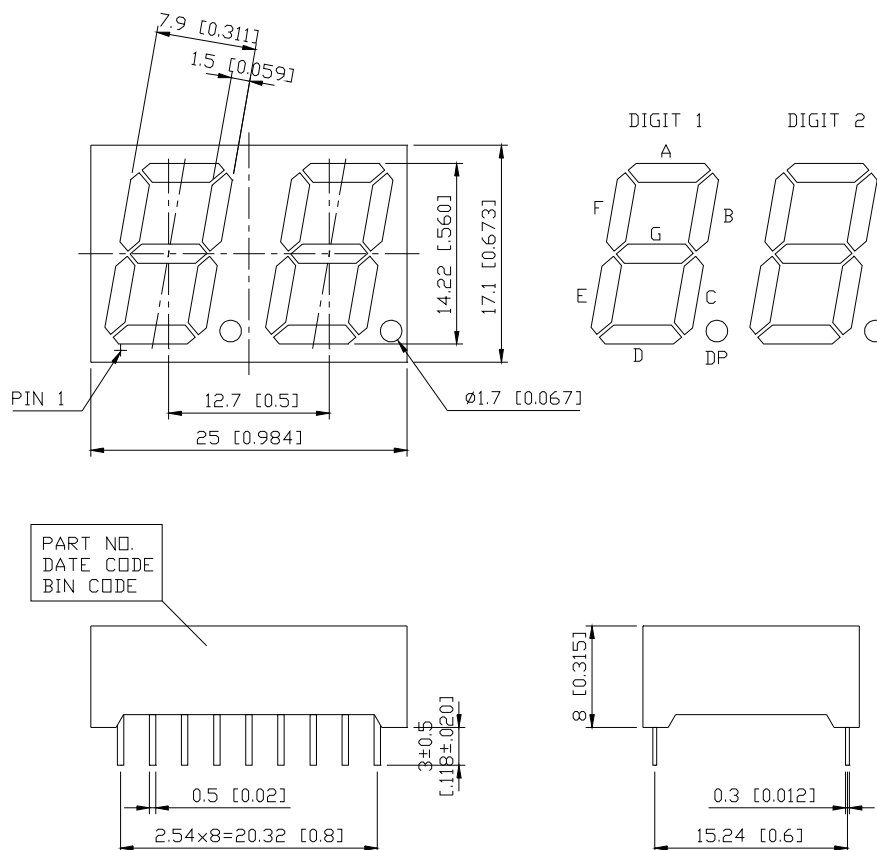
## **DESCRIPTION**

The LTD-5221AA-01J is a 0.56 inch (14.22 mm) digit height dual digit seven-segment display. The device uses AMBER LED chips(GaAsP epi on GaP substrate). This display has gray face and white segments.

## **DEVICE**

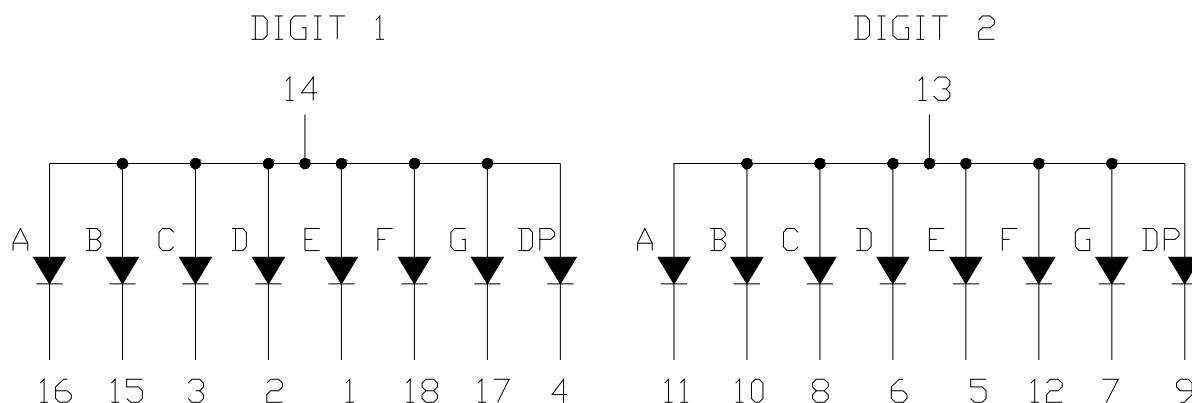
PART NO.	DESCRIPTION
AMBER	COMMON ANODE
LTD-5221AA-01J	RT. HAND DECIMAL

## PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are  $\pm 0.25$  mm unless otherwise noted.

## INTERNAL CIRCUIT DIAGRAM



## **PIN CONNECTION**

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

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	25	mA
Derating Linear From 25°C Per Chip	0.28	mA/°C
Reverse Voltage Per Chip	5	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Soldering Conditions:1/16 inch below seating plane for 3 seconds at 260°C		

\* see figure 5 to establish pulsed condition

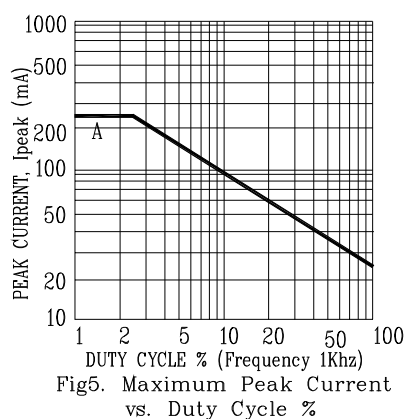
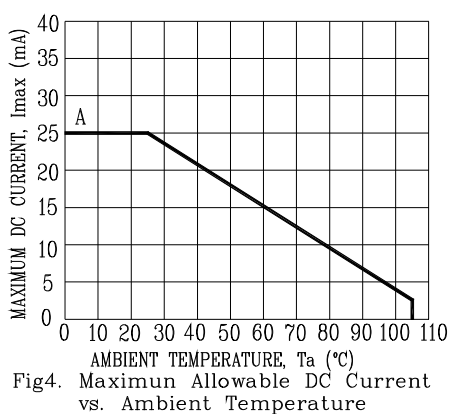
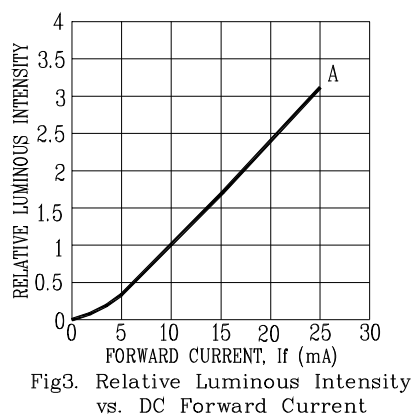
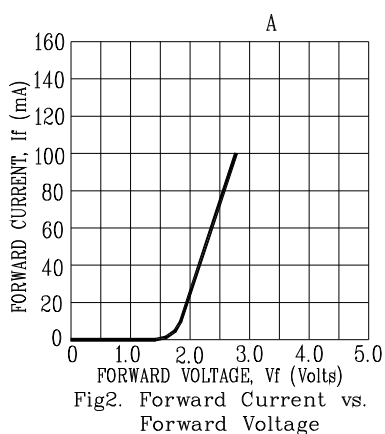
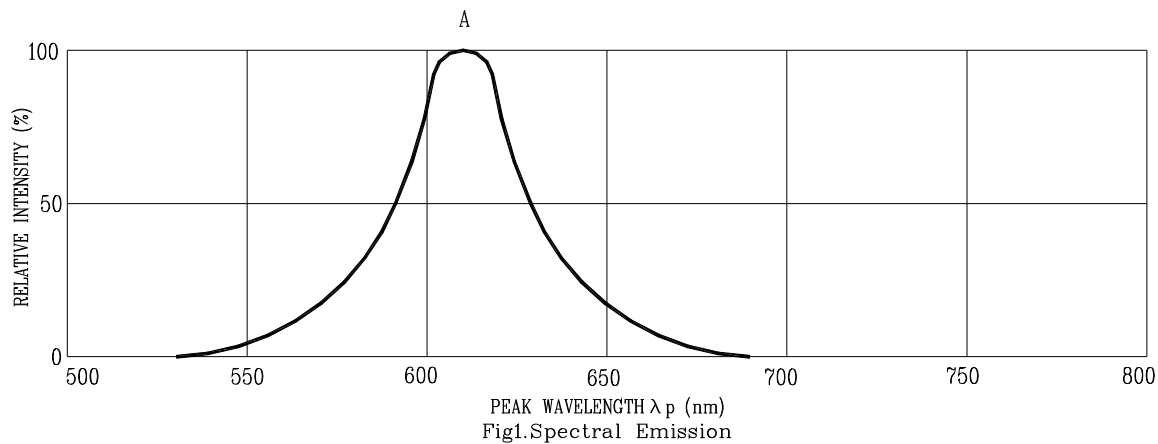
## TRICAL / OPTICAL CHARACTERISTICS AT T<sub>A</sub> = 25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	1300	2600		μcd	I <sub>F</sub> = 10 mA
Peak Emission Wavelength	λ <sub>p</sub>		610		nm	I <sub>F</sub> = 20 mA
Spectral Line Half-Width	Δλ		35		nm	I <sub>F</sub> = 20 mA
Dominant Wavelength	λ <sub>d</sub>		602		nm	I <sub>F</sub> = 20 mA
Forward Voltage Per Chip	V <sub>F</sub>		2.1	2.6	V	I <sub>F</sub> = 20 mA
Reverse Current Per Chip	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)



OPERATION IN THIS  
REGION REQUIRES  
TEMPERATURE  
DERATING OF Ipeak  
MAXIMUM

NOTE: A= AMBER