



LED Display Product Data Sheet LTD-5521AE-J

Spec No.: DS30-2003-021

Effective Date: 02/12/2003

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

FEATURES

- * 0.56 inch (14.22 mm) DIGIT HEIGHT
- * EXCELLENT SEGMENT UNIFORMITY
- * LOW POWER REQUIREMENT
- * HIGH BRIGHTNESS AND HIGH CONTRAST
- * WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * BINNED FOR LUMINOUS INTENSITY

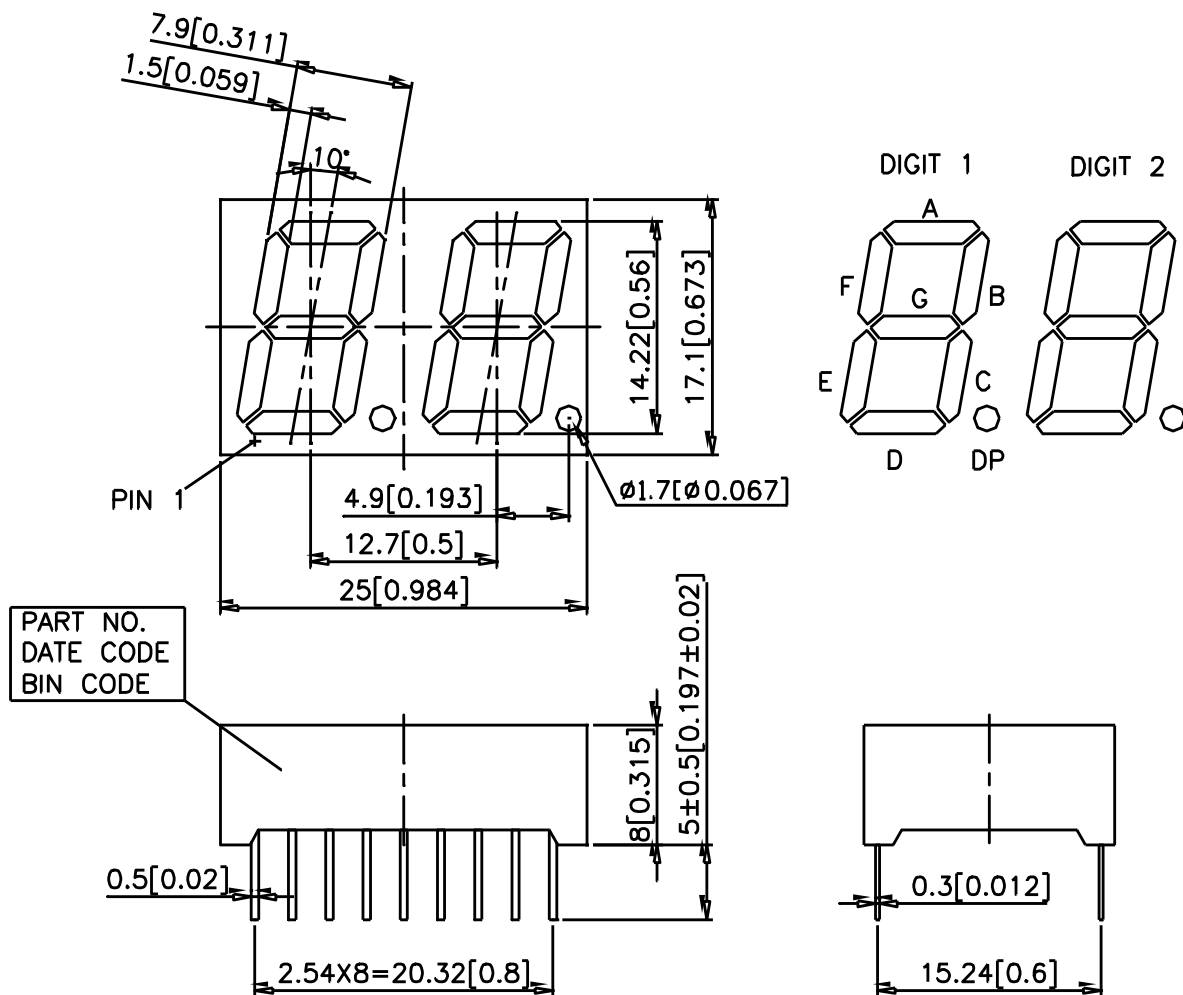
DESCRIPTION

The LTD-5521AE-J is a 0.56 inch (14.22 mm) digit height dual-digit display. This device uses RED ORANGE LED chips (GaAsP epi on GaP substrate). The display has gray face and white segments.

DEVICE

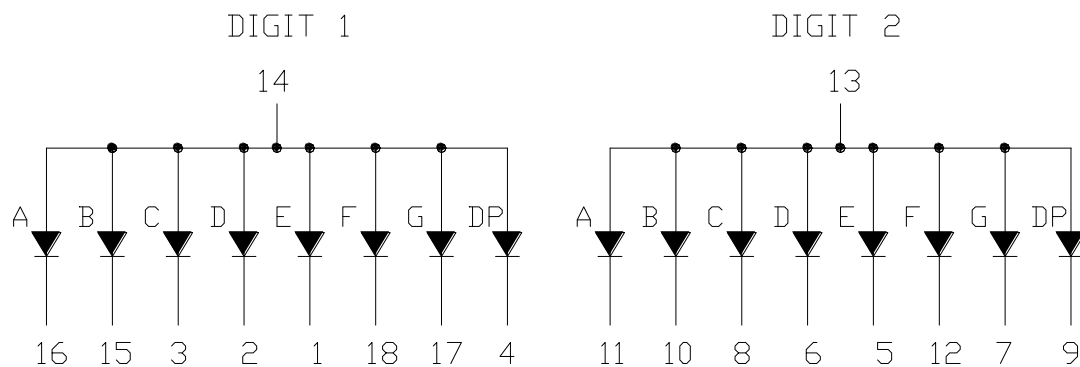
PART NO.	DESCRIPTION
RED ORANGE	COMMON ANODE
LTD-5521AE-J	RT. HAND DECIMAL

PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are $\pm 0.25\text{mm}$ (0.01") 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

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	100*	mA
Continuous Forward Current Per Segment	25	mA
Forward Current Derating from 25 ⁰ C	0.28	mA/ ⁰ C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35 ⁰ C to +105 ⁰ C	
Storage Temperature Range	-35 ⁰ C to +105 ⁰ C	
Soldering Conditions : 1/16 inch below seating plane for 3 seconds at 260 ⁰ C		

* see figure 5 to establish pulsed condition

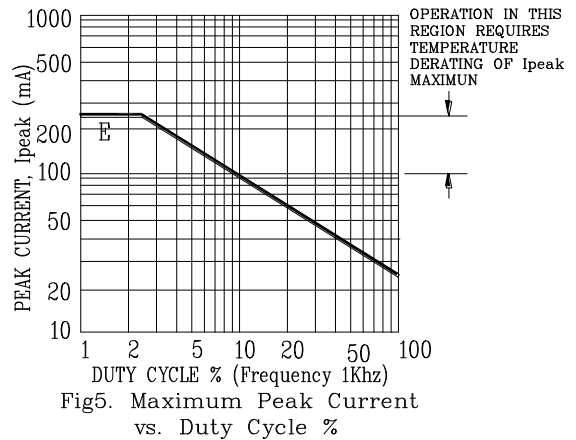
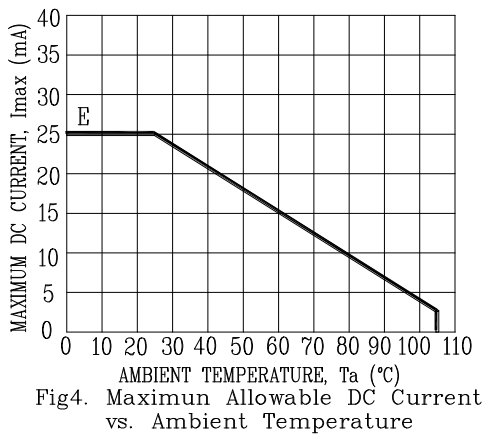
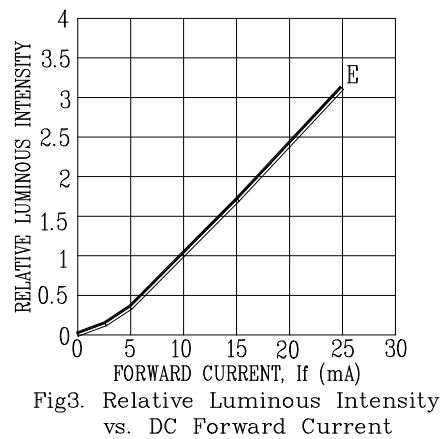
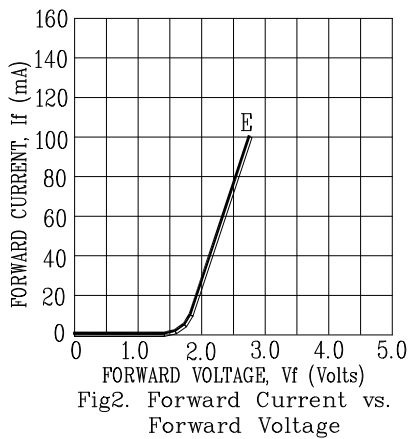
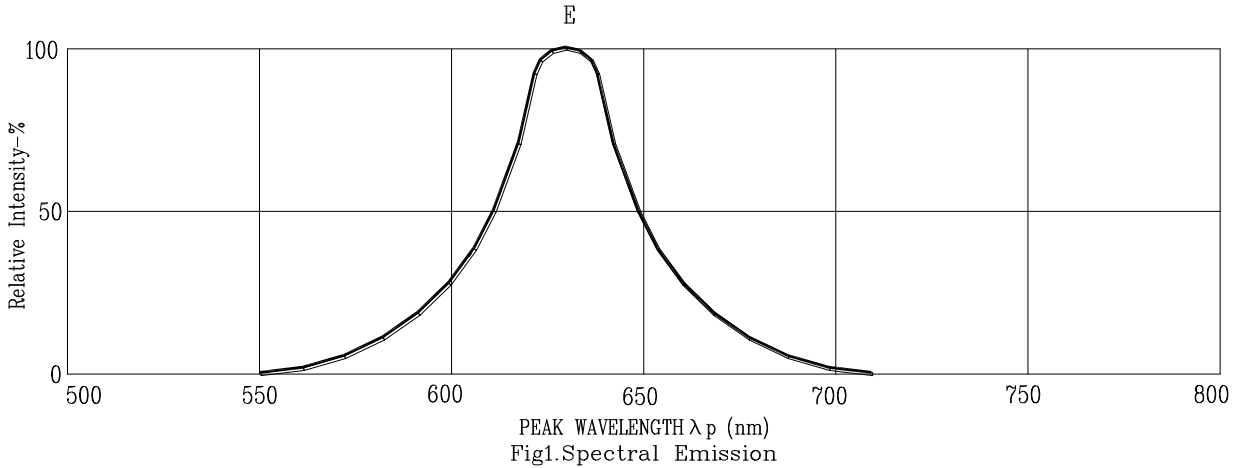
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25⁰C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	I _v	800	2400		μcd	I _F = 10mA
Peak Emission Wavelength	λ _p		630		nm	I _F = 20mA
Spectral Line Half-Width	Δλ		40		nm	I _F = 20mA
Dominant Wavelength	λ _d		621		nm	I _F = 20mA
Forward Voltage Per Segment	V _F		2.0	2.6	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)



NOTE: E=RED ORANGE