



# LED Display

## Product Data Sheet

### LTS-312AE

Spec No.: DS-30-97-279

Effective Date: 04/26/2000

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

## **FEATURES**

- \* 0.3 inch (7.62-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.

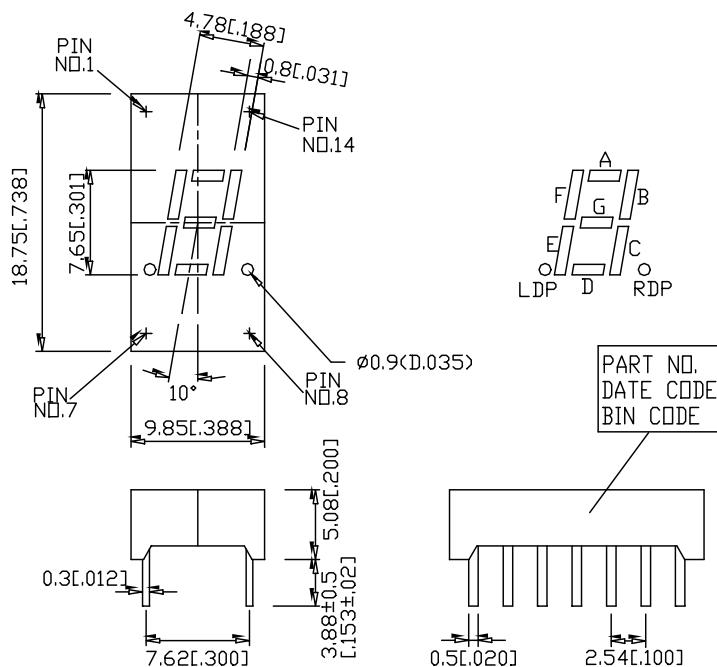
## **DESCRIPTION**

The LTS-312AE is a 0.3-inch (7.62-mm) digit height single digit seven-segment display. This device utilizes red orange LED chips, which are made from GaAsP on a transparent GaP substrate, and has a orange face and orange segments.

## **DEVICE**

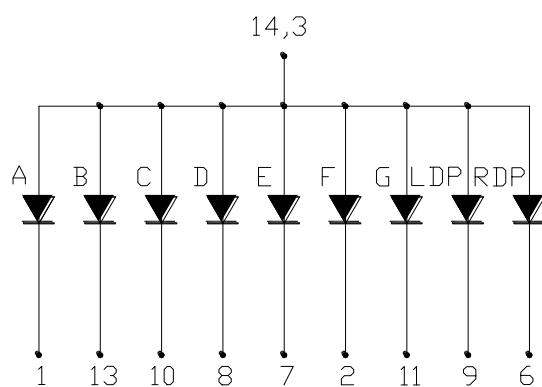
<b>PART NO.</b>	<b>DESCRIPTION</b>
RED ORANGE	
LTS-312AE	COMMON ANODE

## PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerance is  $\pm 0.25$  mm (0.01") unless otherwise noted.

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

No.	CONNECTION
1	CATHODE A
2	CATHODE F
3	COMMON ANODE
4	NO PIN
5	NO PIN
6	CATHODE LDP.
7	CATHODE E
8	CATHODE D
9	CATHODE RDP.
10	CATHODE C
11	CATHODE G
12	NO PIN
13	CATHODE B
14	COMMON ANODE

## ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment ( 1/10 Duty Cycle, 0.1ms Pulse Width )	100	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25°C Per Segment	0.33	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°C	
Solder Temperature: max 260°C for max 3sec at 1.6mm[1/16inch] below seating plane.		

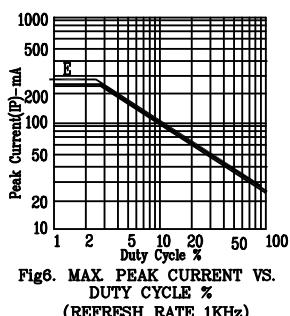
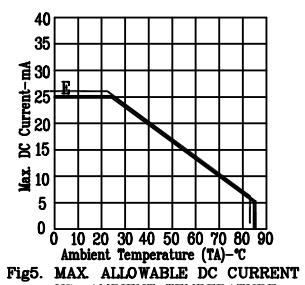
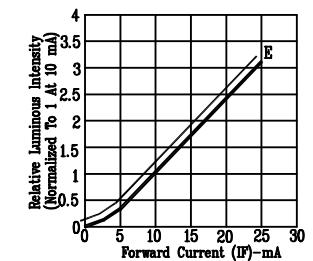
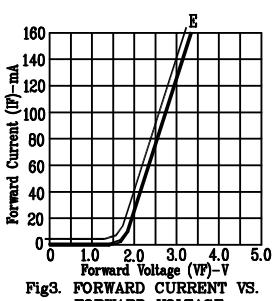
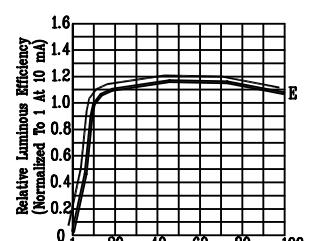
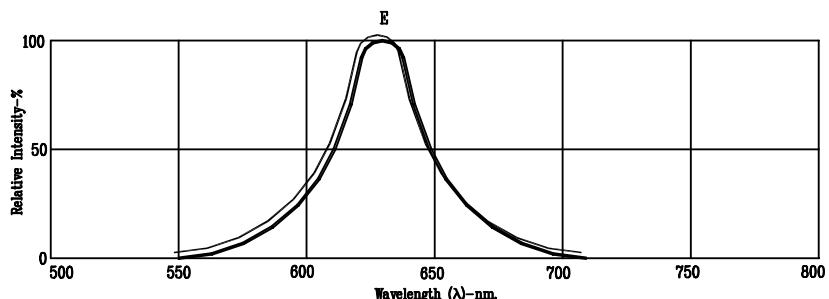
## ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	800	2000		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		630		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		40		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		621		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	V <sub>F</sub>		2.0	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	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)



NOTE: E=RED ORANGE

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