



# LED Display Product Data Sheet LTC-5623JD

Spec No.: DS30-2001-186

Effective Date: 08/06/2013

Revision: C

**LITE-ON DCC**

**RELEASE**

BNS-OD-FC001/A4



# LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

LED DISPLAY

## LTC-5623JD

## DATA SHEET

ITEM	DESCRIPTION	ISSUER	DATE
1	New Spec.	Reo Lin	03/23/2011
2	Modify Operating Temperature Range and Storage Temperature Range in Page 5 and 6 (This request from customer)	Reo Lin	07/19/2013

**FEATURES**

- \* 0.56 inch (14.2 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.
- \* **LEAD-FREE PACKAGE (ACCORDING TO ROHS)**

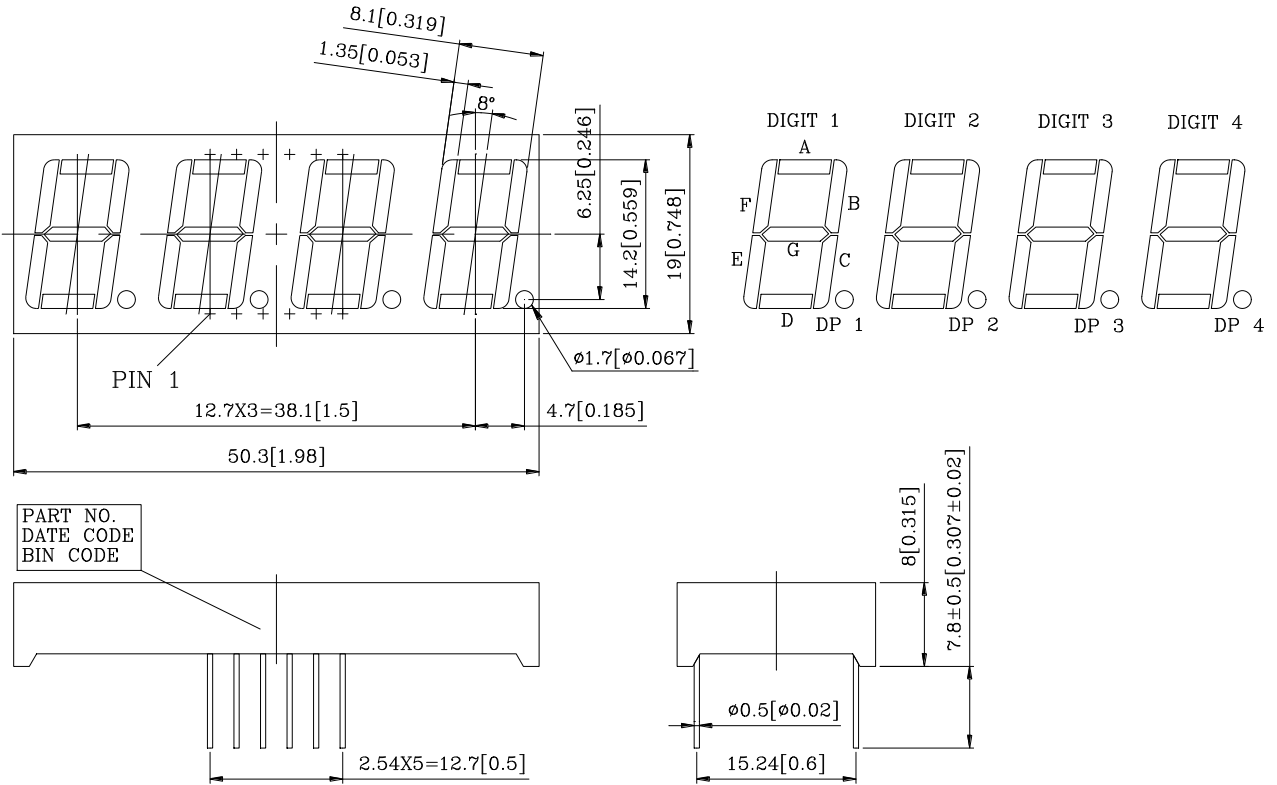
**DESCRIPTION**

The LTC-5623JD is a 0.56 inch (14.2 mm) digit height quadruple digit seven-segment display. This device utilizes AllnGap Hyper Red LED chips, which are made from AllnGap on a non-transparent GaAs substrate, and has a gray face and white segments.

**DEVICE**

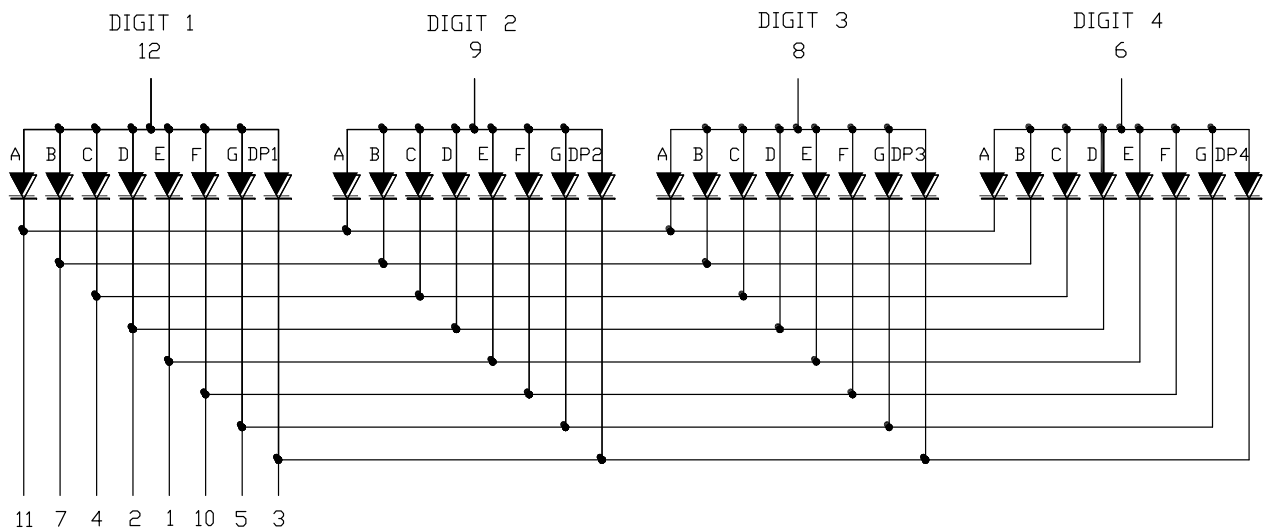
<b>PART NO.</b>	<b>DESCRIPTION</b>
AllnGap Hyper Red	Common Anode
LTC-5623JD	Rt. Hand Decimal

**PACKAGE DIMENSIONS**



- NOTES: 1.All dimensions are in millimeters. Tolerances are  $\pm 0.25$  mm (0.01") unless otherwise noted.  
 2.Pin tip's shift tolerance is +/- 0.4 mm.( suggest mother board pin hole  $\phi 1.0$  mm )

**INTERNAL CIRCUIT DIAGRAM**



**PIN CONNECTION**

NO.	CONNECTION
1	CATHODE E
2	CATHODE D
3	CATHODE D.P.
4	CATHODE C
5	CATHODE G
6	COMMON ANODE DIGIT 4
7	CATHODE B
8	COMMON ANODE DIGIT 3
9	COMMON ANODE DIGIT 2
10	CATHODE F
11	CATHODE A
12	COMMON ANODE DIGIT 1

**ABSOLUTE MAXIMUM RATING AT Ta=25°C**

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	90	mA
Continuous Forward Current Per Segment Derating Linear From 25°C Per Segment	25 0.28	mA mA/°C
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Solder Temperature: max 260°C for max 3sec at 1.6mm[1/16inch] below seating plane.		

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

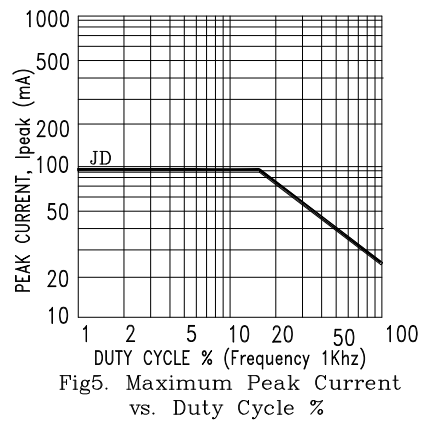
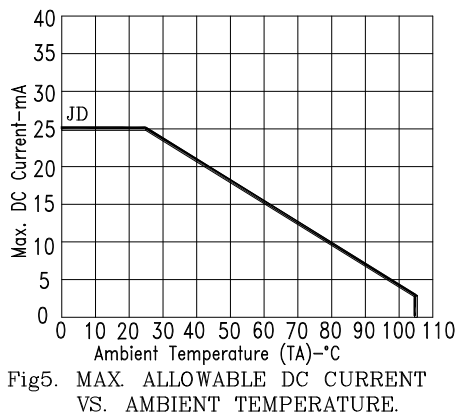
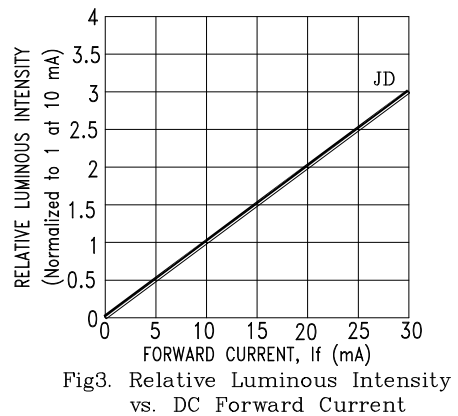
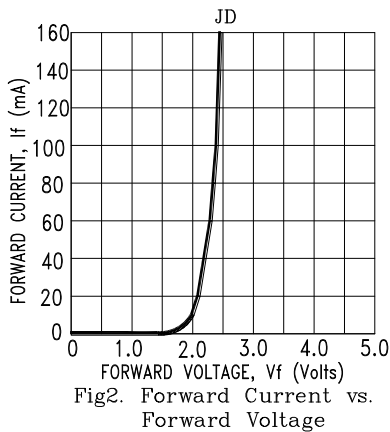
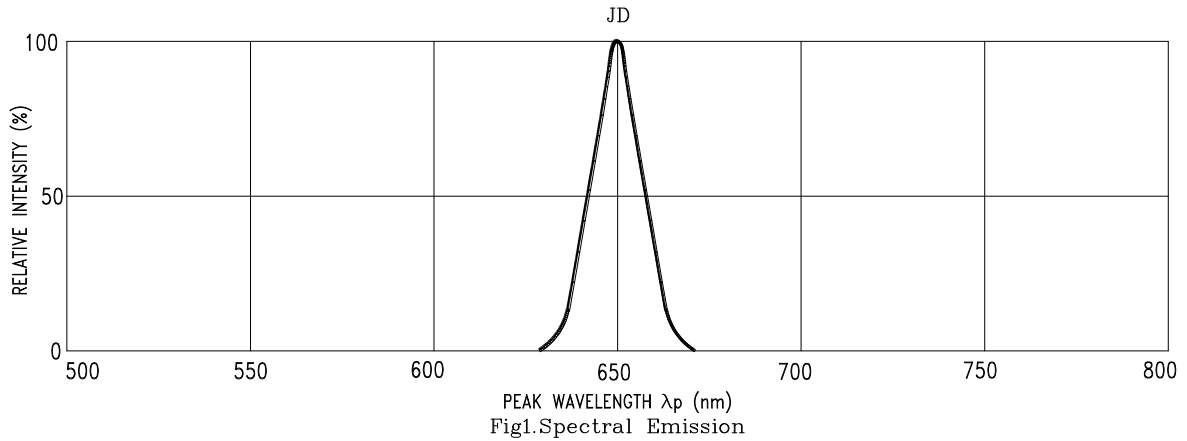
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	320	700		μcd	I <sub>F</sub> =1mA
Peak Emission Wavelength	λ <sub>p</sub>		650		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		20		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		639		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment			2.1	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment <sup>(2)</sup>	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> =1mA

Note:

- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.
- Reverse voltage is only for IR test. It can not continue to operate at this situation.

**TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES**

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE : JD=AlInGaP HYPER RED