# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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**Spec No.: DS30-2001-101** Effective Date: 10/29/2001 Revision: -



BNS-OD-FC001/A4

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## LITEON LITE-ON ELECTRONICS, INC.

## Property of Lite-On Only

#### **FEATURES**

\*0.28 inch (7.0 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 LTC-2623JD is a 0.28 inch (7.0 mm) digit height quadruple digit seven-segment display. This device utilizes AlInGaP Hi-Eff. Red LED chips, which are made from AlInGaP on a transparent GaAs substrate, and has a gray face and white segments. This low current seven-segment display is designed to perform under low power consumption. It is tested and selected for it's excellent low current characteristics. It can be driven in low current condition and the segments are matched. This driving current as low as 1mA per segment is applicable.

## DEVICE

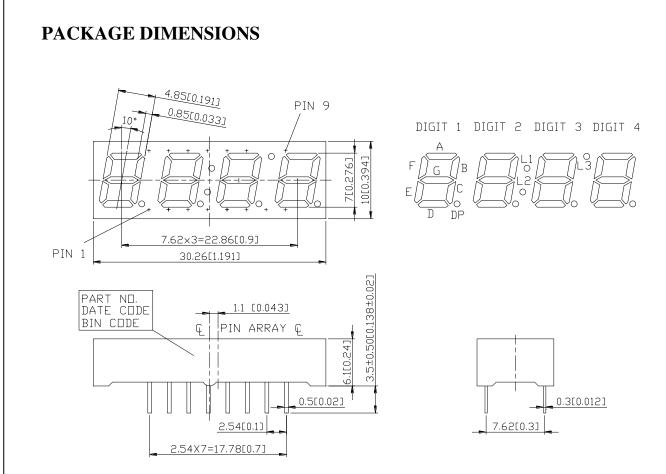
| PART NO.            | DESCRIPTION            |  |  |
|---------------------|------------------------|--|--|
| AllnGaP Hi-Eff. Red | Multiplex Common Anode |  |  |
| LTC-2623JD          | Rt. Hand Decimal       |  |  |

PART NO.: LTC-2623JD



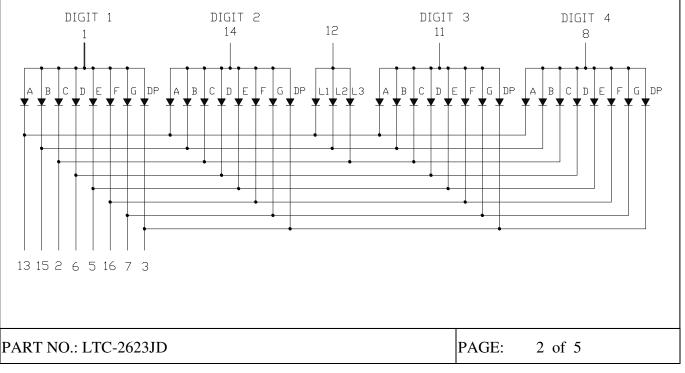
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NOTES: All dimensions are in millimeters. Tolerances are± 0.25 mm (0.01") unless otherwise noted.

## INTERNAL CIRCUIT DIAGRAM



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## **PIN CONNECTION**

| NO | CONNECTION              |
|----|-------------------------|
| 1  | COMMON ANODE DIGIT 1    |
| 2  | CATHODE C,L3            |
| 3  | CATHODE DP              |
| 4  | NO CONNECTION           |
| 5  | CATHODE E               |
| 6  | CATHODE D               |
| 7  | CATHODE G               |
| 8  | COMMON ANODE DIGIT 4    |
| 9  | NO CONNECTION           |
| 10 | NO PIN                  |
| 11 | COMMON ANODE DIGIT 3    |
| 12 | COMMON ANODE L1, L2, L3 |
| 13 | CATHODE A,L1            |
| 14 | COMMON ANODE DIGIT 2    |
| 15 | CATHODE B,L2            |
| 16 | CATHODE F               |

PART NO.: LTC-2623JD

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## ABSOLUTE MAXIMUM RATING AT Ta=25°C

| PARAMETER  | MAXIMUM RATING | UNIT  |  |  |  |
|--|----------------|-------|--|--|--|
| Power Dissipation Per Segment  | 70             | mW    |  |  |  |
| Peak Forward Current Per Segment<br>(1/10 Duty Cycle, 0.1ms Pulse Width)           | 90             | 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 $260^{\circ}$ C for max 3sec at 1.6mm below seating plane. |                |       |  |  |  |

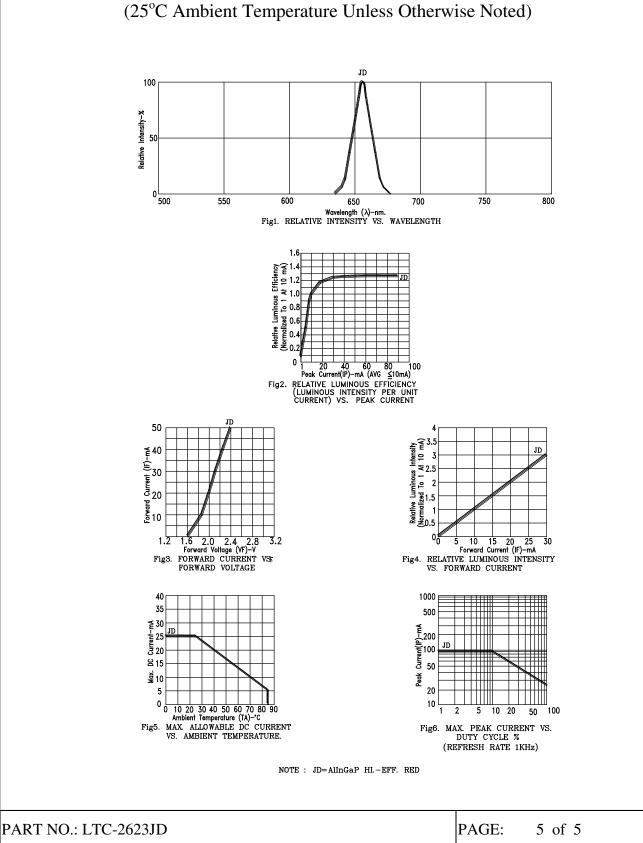
## ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

| PARAMETER                         | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION     |
|-----------------------------------|--------|------|------|------|------|--------------------|
| Average Luminous Intensity        | Iv     | 200  | 600  |      | μcd  | IF=1mA             |
| Peak Emission Wavelength          | λp     |      | 656  |      | nm   | IF=20mA            |
| Spectral Line Half-Width          | Δλ     |      | 22   |      | nm   | IF=20mA            |
| Dominant Wavelength               | λd     |      | 640  |      | nm   | IF=20mA            |
| Forward Voltage Per Segment       | VF     |      | 2.1  | 2.6  | V    | IF=20mA            |
| Reverse Current Per Segment       | Ir     |      |      | 100  | μΑ   | V <sub>R</sub> =5V |
| Luminous Intensity Matching Ratio | Iv-m   |      |      | 2:1  |      | IF=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.



#### **TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES**



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