



LED Display

Product Data Sheet

LTD-4608JD-19J

Spec No.: DS30-2006-109

Effective Date: 08/01/2006

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

FEATURES

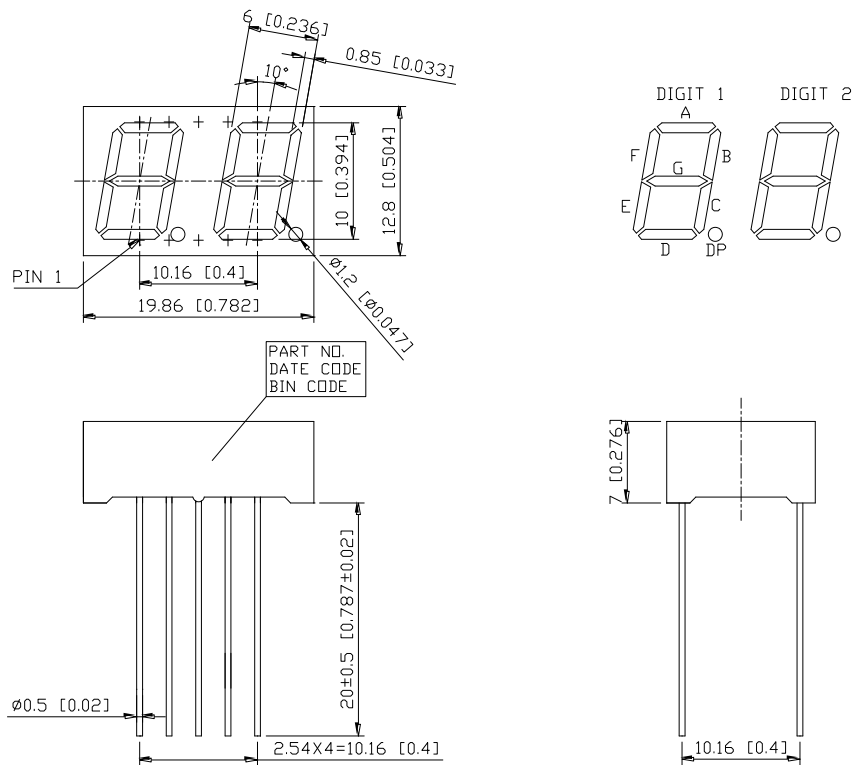
- * 0.4 inch (10 mm) DIGIT HEIGHT
- * EXCELLENT SEGMENT UNIFORMITY
- * LOW POWER REQUIREMENT
- * HIGH BRIGHTNESS AND HIGH CONTRAST
- * WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * BINNED FOR LUMINOUS INTENSITY
- * **LEAD-FREE PACKAGE (ACCORDING TO ROHS)**

DESCRIPTION

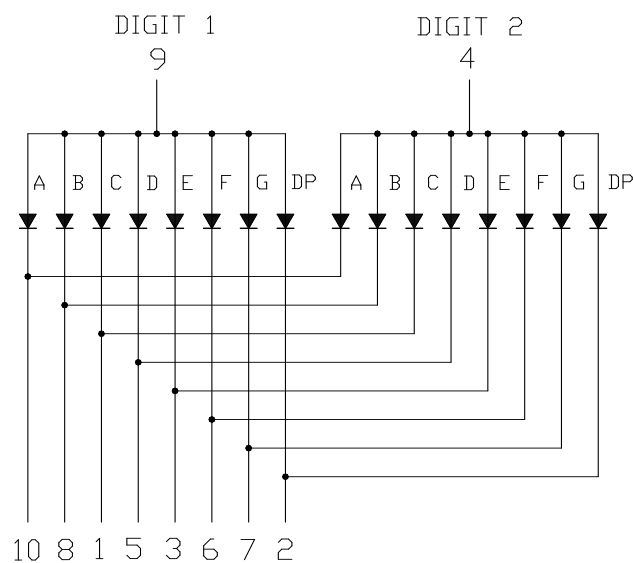
The LTD-4608JD-19J is a 0.4 inch (10 mm) digit height dual-digit display. This device uses AlInGaP HYPER RED chips (AlInGaP epi on GaAs substrate). The display has black face and red segments.

DEVICE

PART NO.	DESCRIPTION
AlInGaP HYPER RED	Duplex Common Anode
LTD-4608JD-19J	Rt. Hand Decimal

PACKAGE DIMENSIONS


NOTES: 1. All dimensions are in millimeters. Tolerances are ± 0.25 mm unless otherwise note.
2. Pin tip's shift tolerance is ± 0.4 mm.

INTERNAL CIRCUIT DIAGRAM


PIN CONNECTION

No	CONNECTION
1	Cathode C
2	Cathode D.P.
3	Cathode E
4	Common Anode (Digit 2)
5	Cathode D
6	Cathode F
7	Cathode G
8	Cathode B
9	Common Anode (Digit 1)
10	Cathode A

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	90	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 or of temperature unit (during assembly) not over max. temperature rating above.		

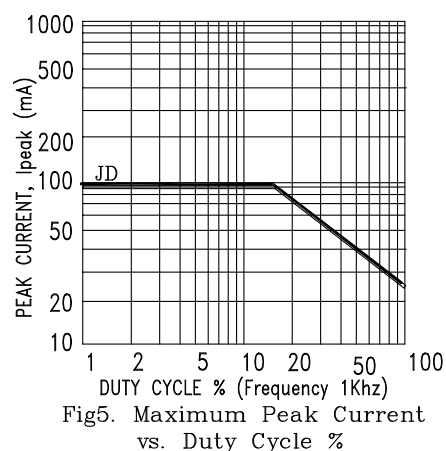
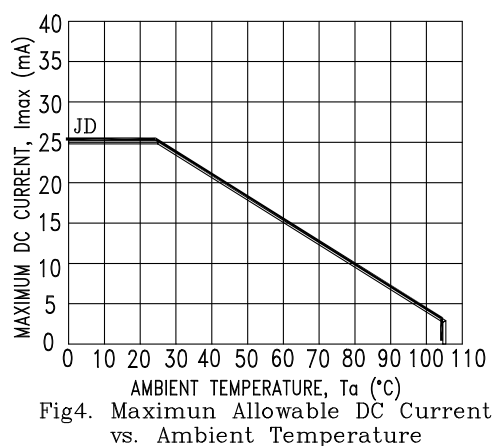
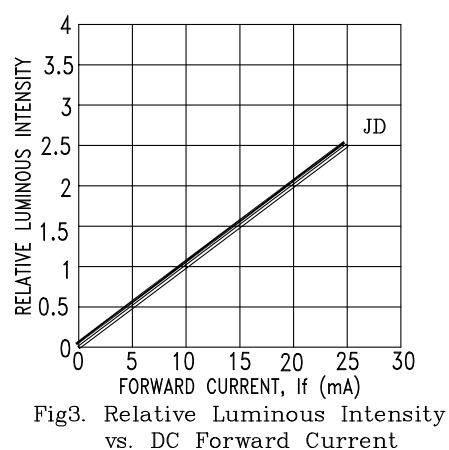
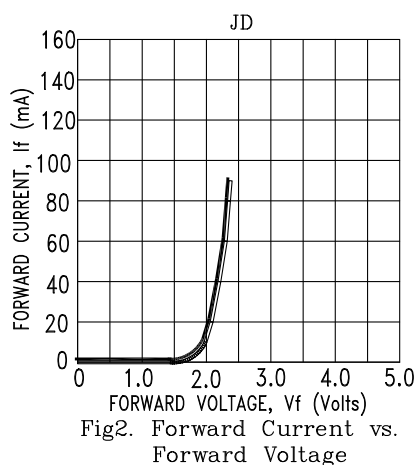
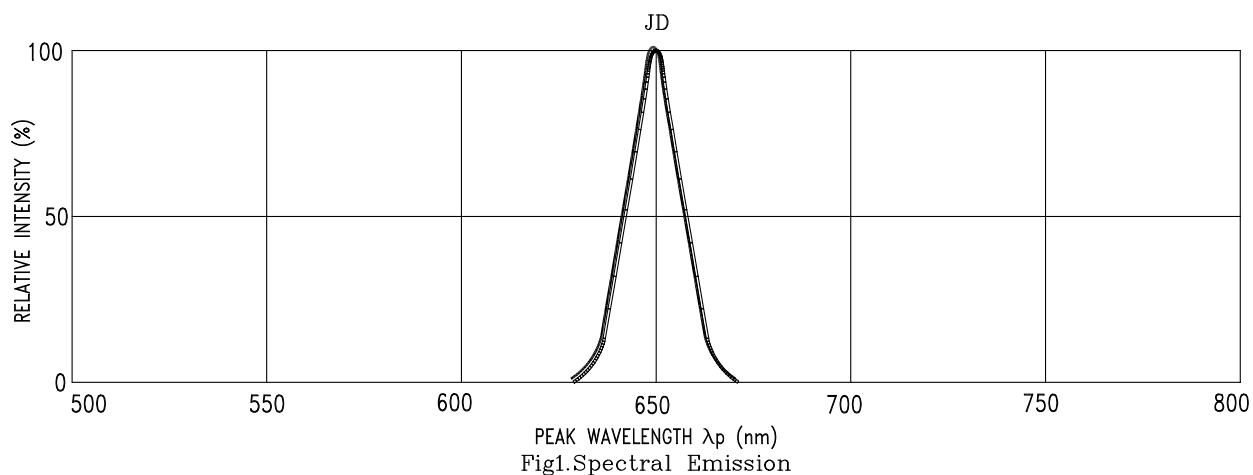
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25⁰C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	I _v	200	650		μcd	I _F = 1mA
Peak Emission Wavelength	λ _p		650		nm	I _F = 20mA
Spectral Line Half-Width	Δλ		20		nm	I _F = 20mA
Dominant Wavelength	λ _d		639		nm	I _F = 20mA
Forward Voltage Per Segment	V _F		2.1	2.6	V	I _F = 20mA
Reverse Current Per Segment	I _R			100	μA	V _R = 5V
Luminous Intensity Matching Ratio (Similar Light Area)	I _v -m			2 : 1		I _F = 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

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE : JD=AlInGaP HYPER RED