



LED Display Product Data Sheet LTC-5336JD

Spec No.: DS30-2001-206

Effective Date: 11/21/2006

Revision: A

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

FEATURES

- * 0.52 inch (13.2 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).**

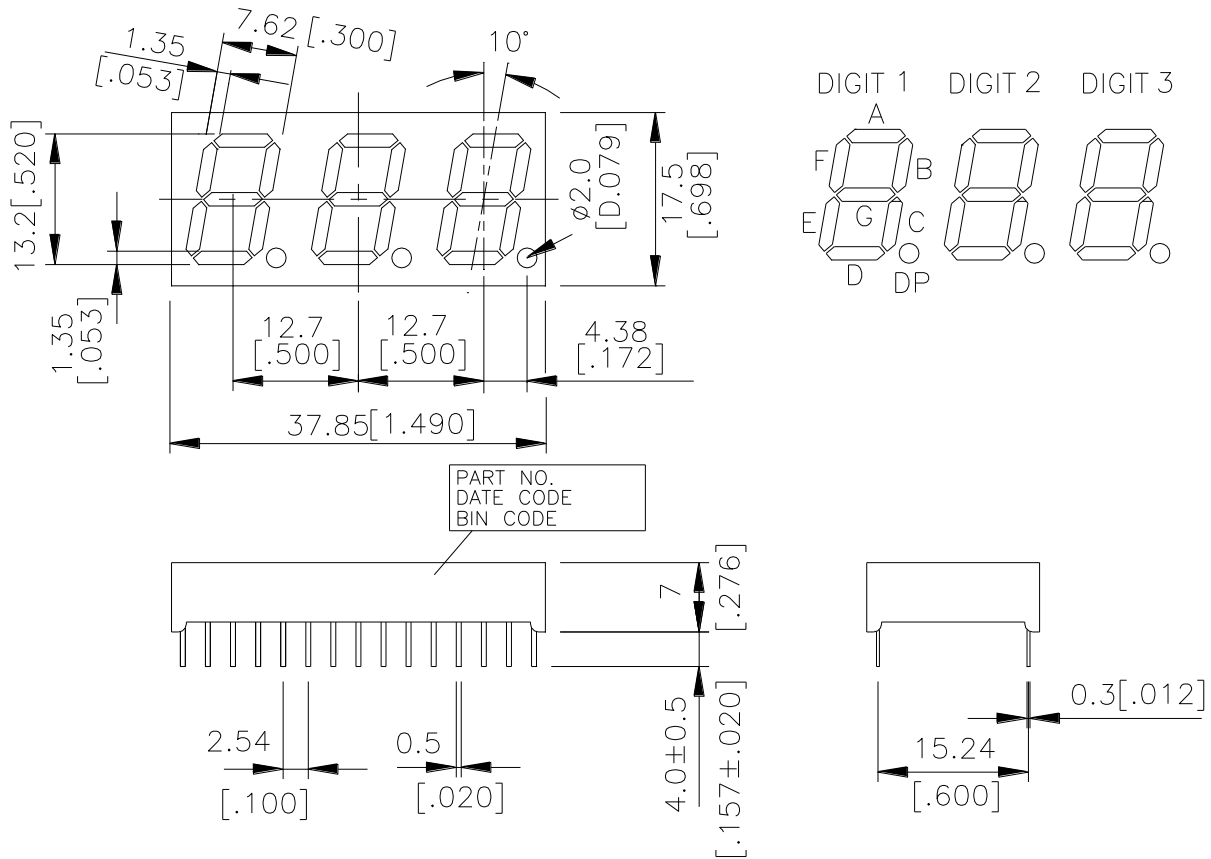
DESCRIPTION

The LTC-5336JD is a 0.52 inch (13.2 mm) digit height triple digit seven-segment display. This device utilizes AlInGaP Hyper Red LED chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a gray face and white segments.

DEVICE

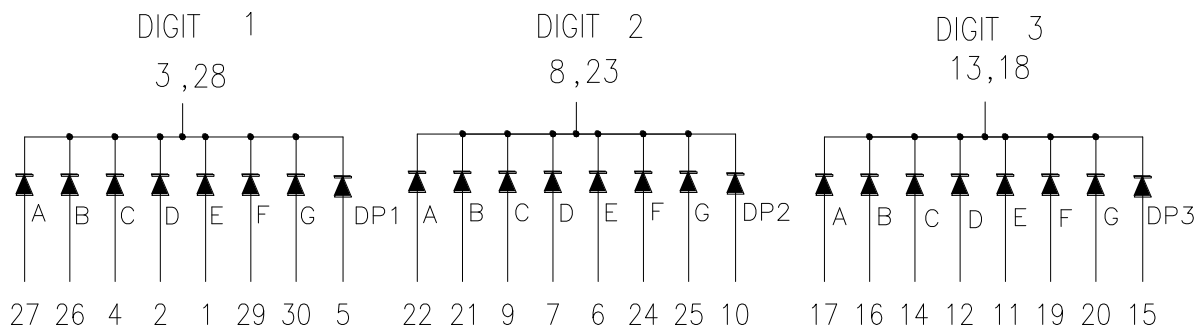
PART NO.	DESCRIPTION
AlInGaP Hyper Red	Common Cathode
LTC-5336JD	Rt. Hand Decimal

PACKAGE DIMENSIONS



NOTES: 1. All dimensions are in millimeters. Tolerances are ± 0.25 mm (0.01") unless otherwise noted. .
 2. Pin tip's shift tolerance is ± 0.4 mm.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

NO.	CONNECTION	NO.	CONNECTION
1	ANODE E (DIGIT 1)	16	ANODE B (DIGIT 3)
2	ANODE D (DIGIT 1)	17	ANODE A (DIGIT 3)
3	COMMON CATHODE (DIGIT 1)	18	COMMON CATHODE (DIGIT 3)
4	ANODE C (DIGIT 1)	19	ANODE F (DIGIT 3)
5	ANODE D.P. (DIGIT 1)	20	ANODE G (DIGIT 3)
6	ANODE E (DIGIT 2)	21	ANODE B (DIGIT 2)
7	ANODE D (DIGIT 2)	22	ANODE A (DIGIT 2)
8	COMMON CATHODE (DIGIT 2)	23	COMMON CATHODE (DIGIT 2)
9	ANODE C (DIGIT 2)	24	ANODE F (DIGIT 2)
10	ANODE D.P. (DIGIT 2)	25	ANODE G (DIGIT 2)
11	ANODE E (DIGIT 3)	26	ANODE B (DIGIT 1)
12	ANODE D (DIGIT 3)	27	ANODE A (DIGIT 1)
13	COMMON CATHODE (DIGIT 3)	28	COMMON CATHODE (DIGIT 1)
14	ANODE C (DIGIT 3)	29	ANODE F (DIGIT 1)
15	ANODE D.P.(DIGIT 3)	30	ANODE G (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 0.33	mA mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Solder Conditions: 1/16 inch below seating plane for 3 seconds at 260°C., or temperature of unit (during assembly) not over max. temperature rating above		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	320	700		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 =1mA
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)

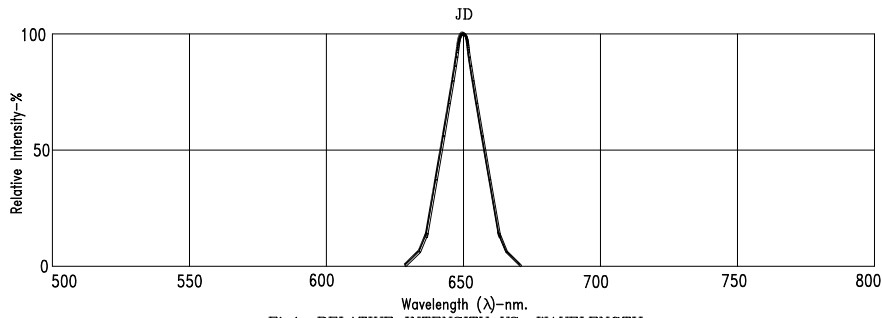


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

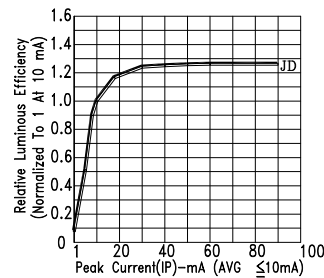


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT

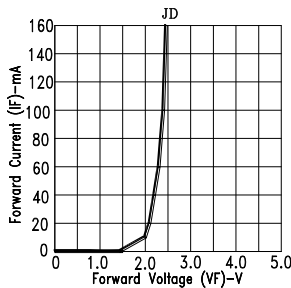


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

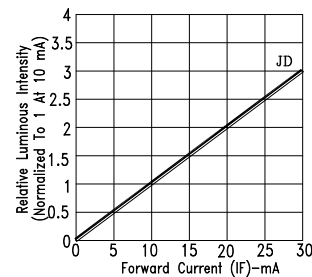


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

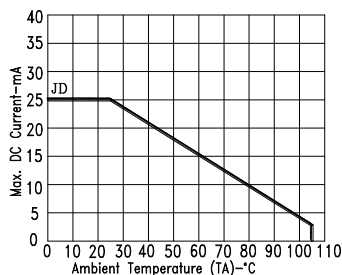


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

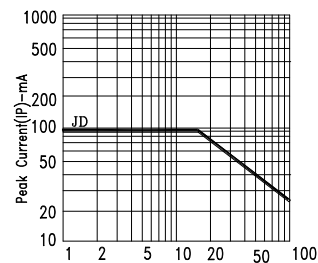


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE : JD=AlInGaP HYPER RED