



LED Display

Product Data Sheet

LTC-5836JG

Spec No.: DS30-2003-210

Effective Date: 10/25/2003

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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FEATURES

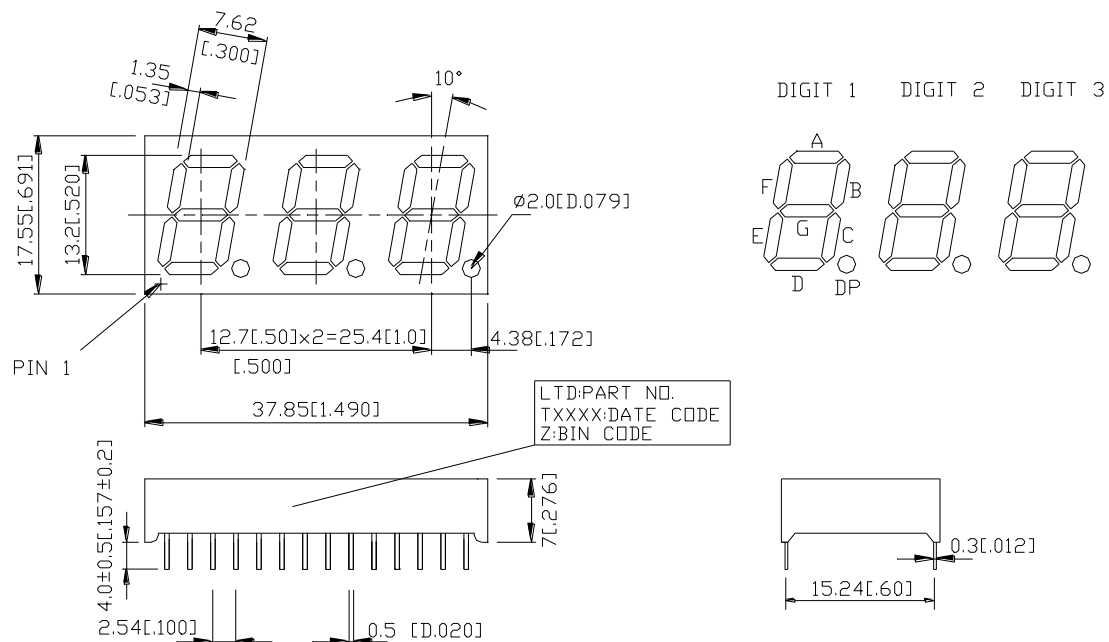
- * 0.52 inch (13.2 mm) DIGIT HEIGHT
- * CONTINUOUS UNIFORM SEGMENTS
- * LOW POWER REQUIREMENT
- * EXCELLENT CHARACTERS APPEARANCE
- * HIGH BRIGHTNESS & HIGH CONTRAST
- * WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * CATEGORIZED FOR LUMINOUS INTENSITY

DESCRIPTION

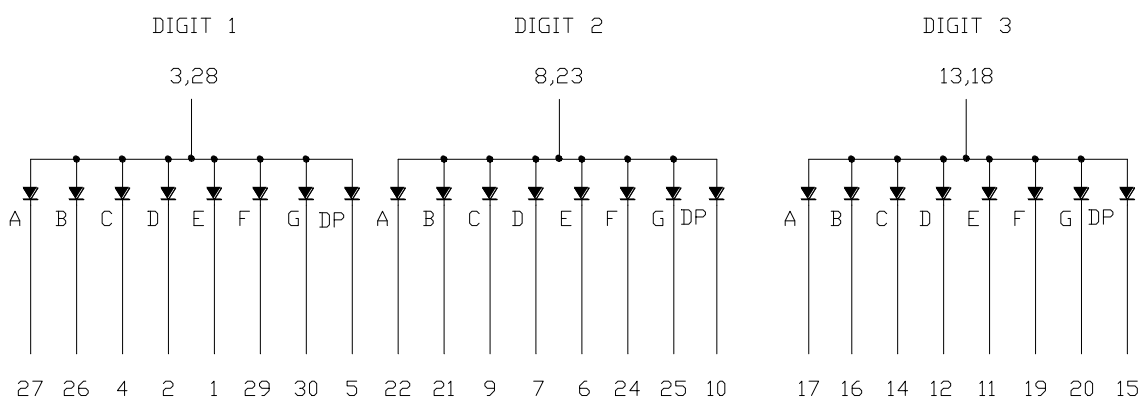
The LTC-5836JG is a 0.52 inch (13.2 mm) digit height triple LED display. This device uses AS-AlInGaP GREEN LED chips(AlInGaP epi on GaAs substrate).The display has gray face and white segments.

DEVICE

PART NO.	DESCRIPTION
AlInGaP GREEN	Common Anode
LTC-5836JG	R.t Hand Decimal

PACKAGE DIMENSIONS


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

INTERNAL CIRCUIT DIAGRAM


PIN CONNECTION

NO	CONNECTION	NO	CONNECTION
1	CATHODE E (DIGIT 1)	16	CATHODE B (DIGIT 3)
2	CATHODE D (DIGIT 1)	17	CATHODE A (DIGIT 3)
3	COMMON ANODE (DIGIT 1)	18	COMMON ANODE (DIGIT 3)
4	CATHODE C (DIGIT 1)	19	CATHODE F (DIGIT 3)
5	CATHODE D.P. (DIGIT 1)	20	CATHODE G (DIGIT 3)
6	CATHODE E (DIGIT 2)	21	CATHODE B (DIGIT 2)
7	CATHODE D (DIGIT 2)	22	CATHODE A (DIGIT 2)
8	COMMON ANODE (DIGIT 2)	23	COMMON ANODE (DIGIT 2)
9	CATHODE C (DIGIT 2)	24	CATHODE F (DIGIT 2)
10	CATHODE D.P. (DIGIT 2)	25	CATHODE G (DIGIT 2)
11	CATHODE E (DIGIT 3)	26	CATHODE B (DIGIT 1)
12	CATHODE D (DIGIT 3)	27	CATHODE A (DIGIT 1)
13	COMMON ANODE (DIGIT 3)	28	COMMON ANODE (DIGIT 1)
14	CATHODE C (DIGIT 3)	29	CATHODE F (DIGIT 1)
15	CATHODE D.P. (DIGIT 3)	30	CATHODE G (DIGIT 1)

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	60*	mA
Continuous Forward Current Per Segment	25	mA
Forward Current Derating from 25 ⁰ C	0.33	mA/ ⁰ C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35 ⁰ C to +85 ⁰ C	
Storage Temperature Range	-35 ⁰ C to +85 ⁰ C	
Soldering Conditions : 1/16 inch below seating plane for 3 seconds at 260 ⁰ C		

* see figure 5 to establish pulsed condition

ELECTRICAL / OPTICAL CHARACTERISTICS

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	I _v	200	577 6346		μcd	I _F =1mA I _F =10mA
Peak Emission Wavelength	λ _p		571		nm	I _F =20mA
Spectral Line Half-Width	Δλ		15		nm	I _F =20mA
Dominant Wavelength	λ _d		572		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	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'clariage) eye-response curve.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

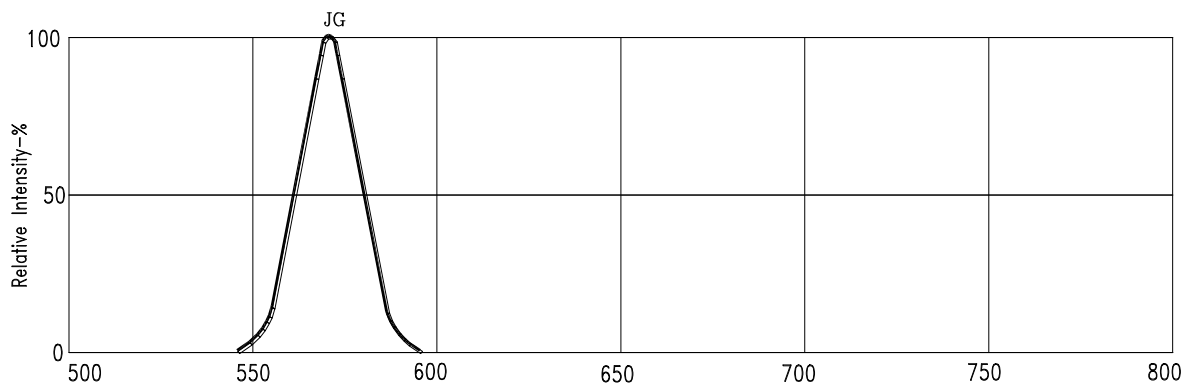


Fig1. Spectral Emission

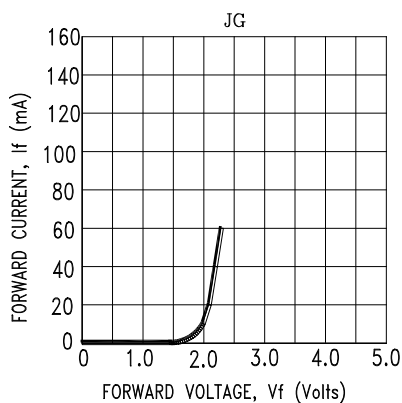


Fig2. Forward Current vs. Forward Voltage

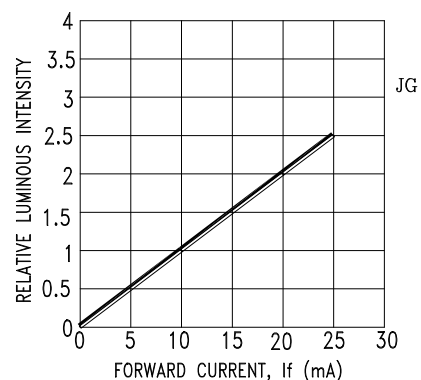


Fig3. Relative Luminous Intensity vs. DC Forward Current

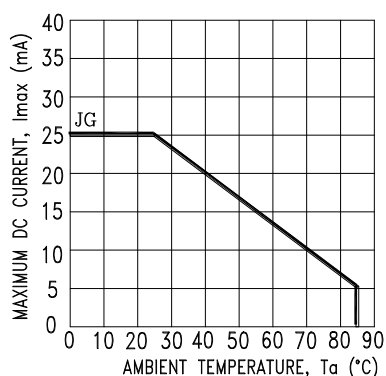


Fig4. Maximum Allowable DC Current vs. Ambient Temperature

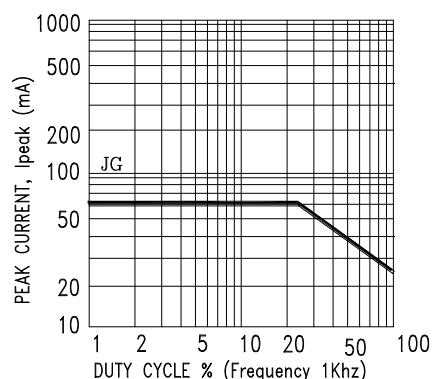


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE : JG=AlInGaP Green