



LED Display

Product Data Sheet

LTD-4708JG

Spec No.: DS30-2001-437

Effective Date: 07/05/2012

Revision: A

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LED DISPLAY**LTD-4708JG**
DATA SHEET

Rev	Description	By
-	NPPR Original Spec	Phanomkorn J May 07,2002
A	Add the cosmetic spec	Phanomkorn J June 19,2012

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Date	

FEATURES

- * 0.4-INCH (10.0-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.
- * LEAD-FREE PACKAGE (ACCORDING TO ROHS)

DESCRIPTION

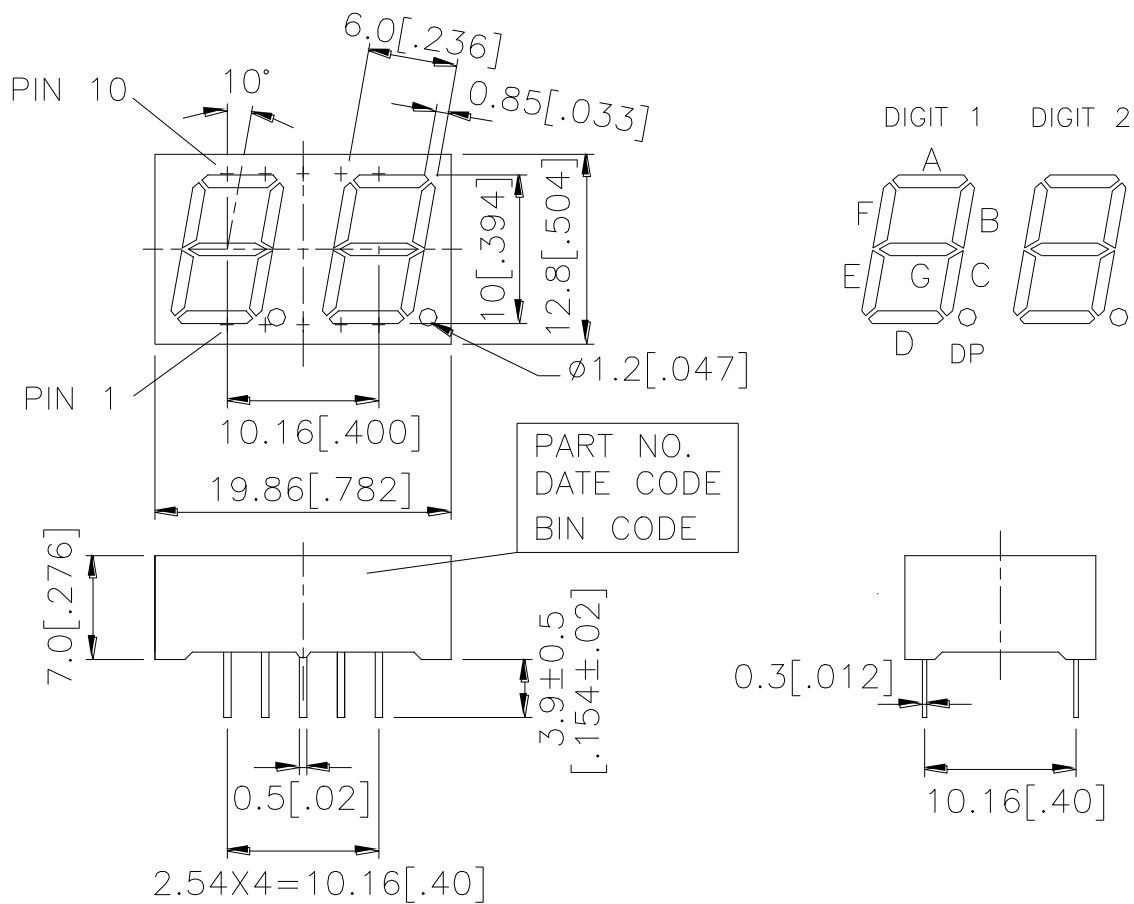
The LTD-4708JG is a 0.4-inch (10.0-mm) digit height dual digit seven-segment display. This device utilizes AlInGaP Green LED chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a gray face and white segments.

DEVICE

PART NO.	DESCRIPTION
AlInGaP Green	Duplex Common Cathode Rt. Hand Decimal
LTD-4708JG	

Property of Lite-on Only

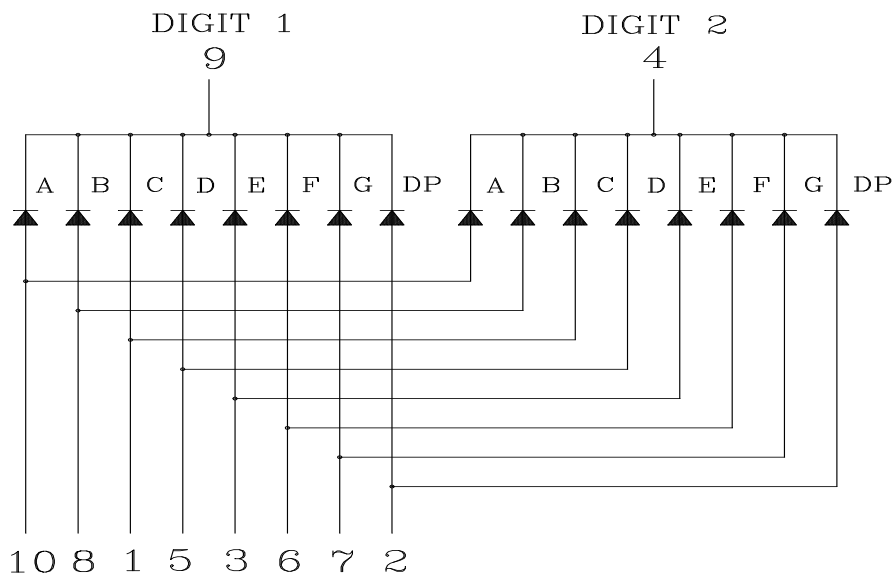
PACKAGE DIMENSIONS



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.
3. Recommend the best PCB hole: $\varnothing 1.0\text{mm}$
4. Foreign material on segment $\leq 10\text{mils}$
5. Ink contamination (surface) $\leq 20\text{mils}$
6. Bending $\leq 1/100$
7. Bubble in segment $\leq 10\text{mils}$

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

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)	60	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25 ⁰ C Per Segment	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.		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

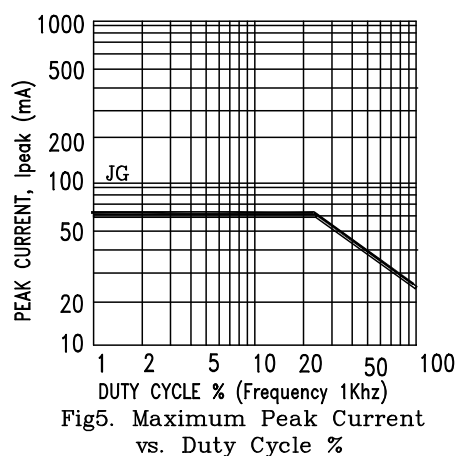
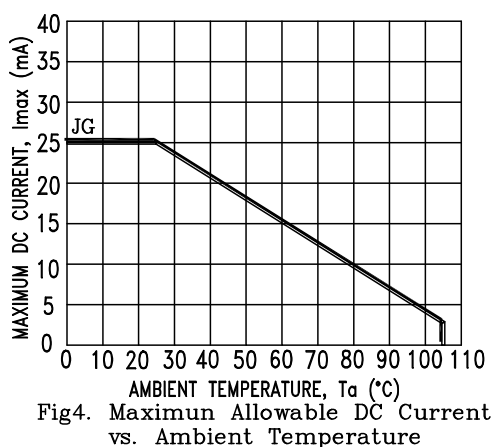
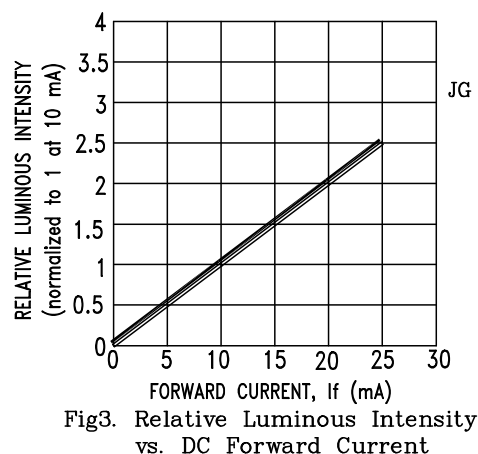
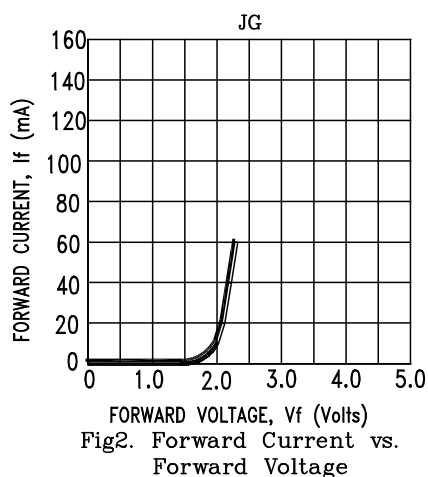
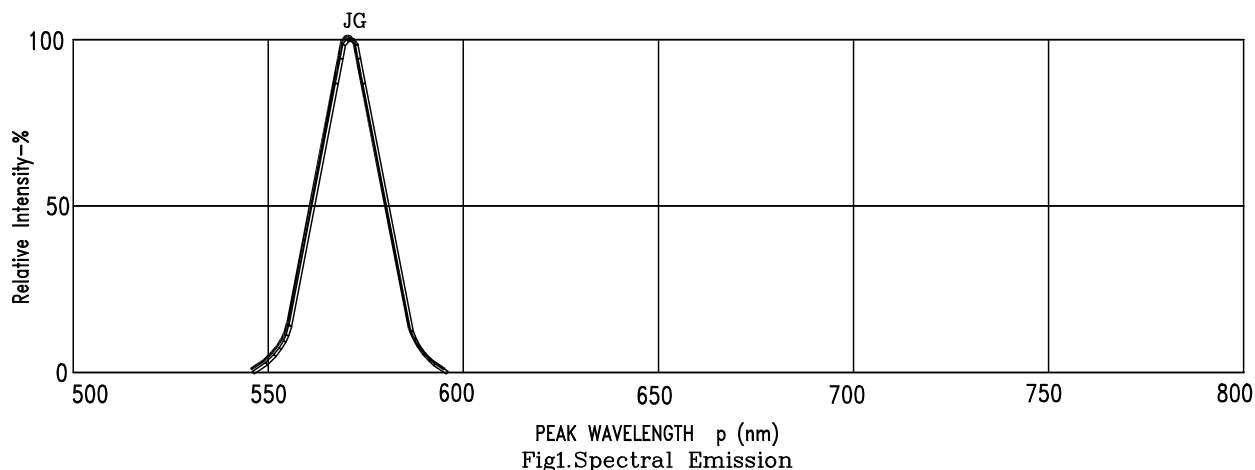
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	320	850		μcd	I _F =1mA
Peak Emission Wavelength	λ _p		571		nm	I _F =20mA
Spectral Line Half-Width	Δλ		15		nm	I _F =20mA
Dominant Wavelength	λ _d		572		nm	I _F =20mA
Forward Voltage Per Segment	V _F		2.05	2.6	V	I _F =1mA
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

NOTES:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.
2. Cross talk specification $\leq 2.5\%$
3. Reverse voltage is only for IR test. It cannot continue to operate at this situation.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE : JG=AlInGaP Green