LITEON®
OPTOELECTRONICS

LED Display

Product Data Sheet

LTC-4624JG

Spec No.: DS30-2004-303

Effective Date: 06/29/2010

Revision: B

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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LED DISPLAY

LTC-4624JG
DATASHEET

Rev	Description	By
01	ORIGINAL	TH Chen 11/27/2004
(Above data for PD and Customer tracking only)		
-	NPPR Received and Upload on OPNC	TH Chen 11/27/2004
A	ADD Subcon TBK	CHUNCHUNLEE 05/18/2010
B	Correct IV Min. from 320ucd to 200ucd TYP. from 750ucd to 464ucd	KITTISAK B. June 08/2010

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FEATURES

∗0.4inch (10.0mm) 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**

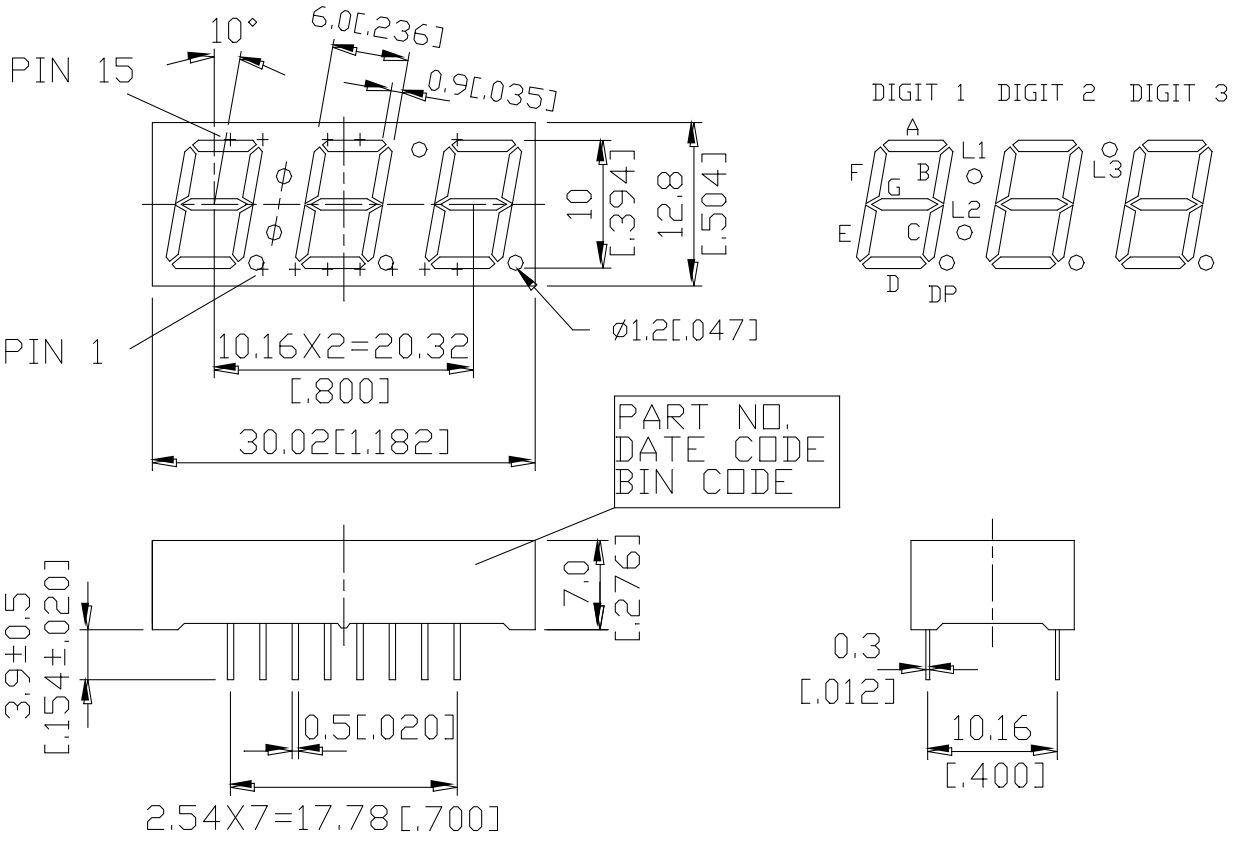
DESCRIPTION

The LTC-4624JG is a 0.4 inch (10.0 mm) digit height triple digit seven-segment display. This device uses AlInGaP Green LED chips(AlInGaP epi on GaAs substrate) The display has gray face and white segments.

DEVICE

PART NO.	DESCRIPTION
AlInGaP GREEN	Multiplex Common Anode
LTC-4624JG	Rt. Hand Decimal

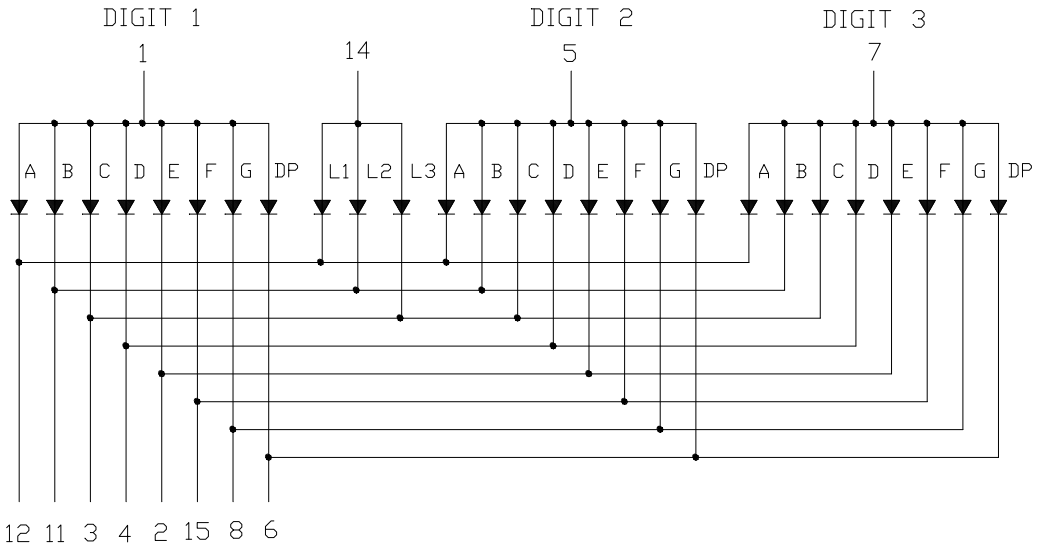
PACKAGE DIMENSIONS



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.
3. Foreign material on segment ≦10mils
4. Ink contamination (surface) ≦20mils
5. Bending≦1% of reflector length
6. Bubble in segment ≦10mils

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

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 Forward Current Derating from 25^0C	25 0.28	mA mA/℃
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35℃ to +105℃	
Storage Temperature Range	-35℃ to +105℃	
Soldering Conditions : 1/16 inch below seating plane for 5 seconds at 260 ^{0}C Or temperature of unit (during assembly) not over max. temperature rating above		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25^{o}C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	200	464		μcd	I_F=1mA
Peak Emission Wavelength	λp		571		nm	I_F=20mA
Spectral Line Half-Width	Δλ		15		nm	I_F=20mA
Dominant Wavelength	λd		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: 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 ≦2.5%

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

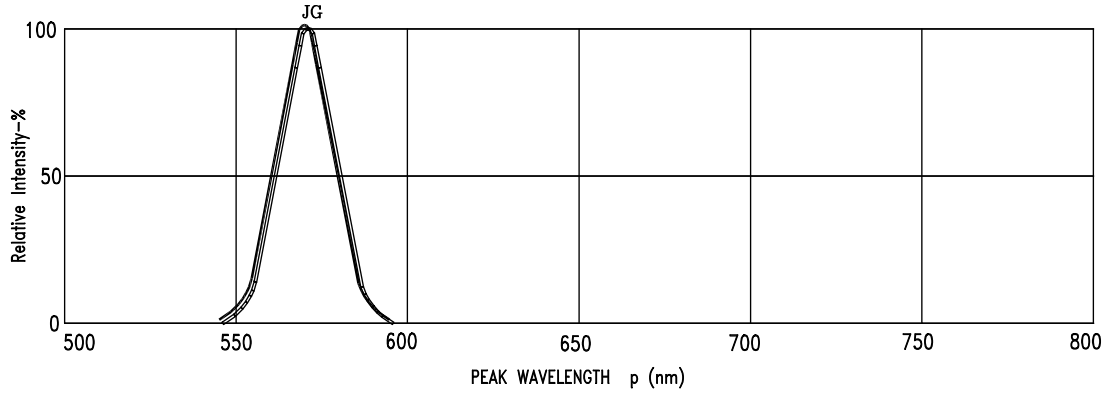


Fig1.Spectral Emission

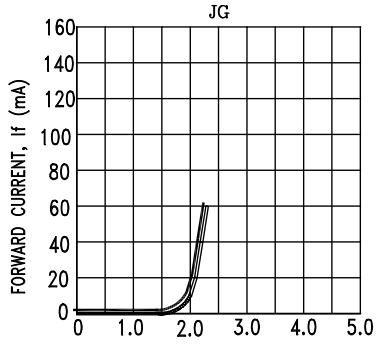


Fig2. Forward Current vs. Forward Voltage

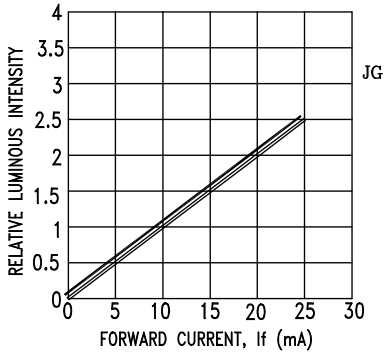


Fig3. Relative Luminous Intensity vs. DC Forward Current

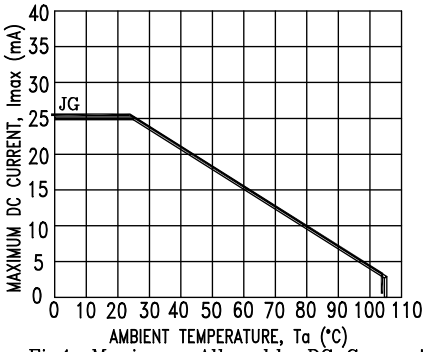


Fig4. Maximun Allowable DC Current vs. Ambient Temperature

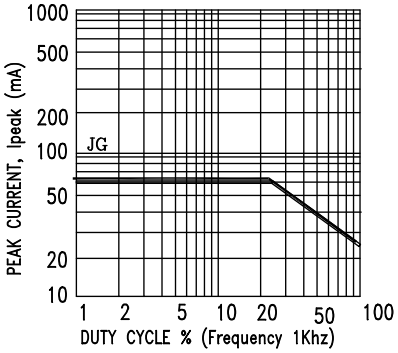


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE : JG=AlInGaP Green