

LED DISPLAY

LTC-561JG-J

DATA SHEET

Rev	Description	By
01	ORIGINAL (Refer to contour drawing Revision (-))	<u>PRAPHAN</u>
(Above data for PD and Customer tracking only)		
-	NPPR Received and Upload on OPNC	<u>KITTISAK B. Nov 05/2008</u>

SPEC. NO.: DS30-2008-0175

D A T E : Nov 05/2008

REV. NO. : -

PAGE NO. : 0 OF 7

FEATURES

- * 0.56 inch (14.2 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

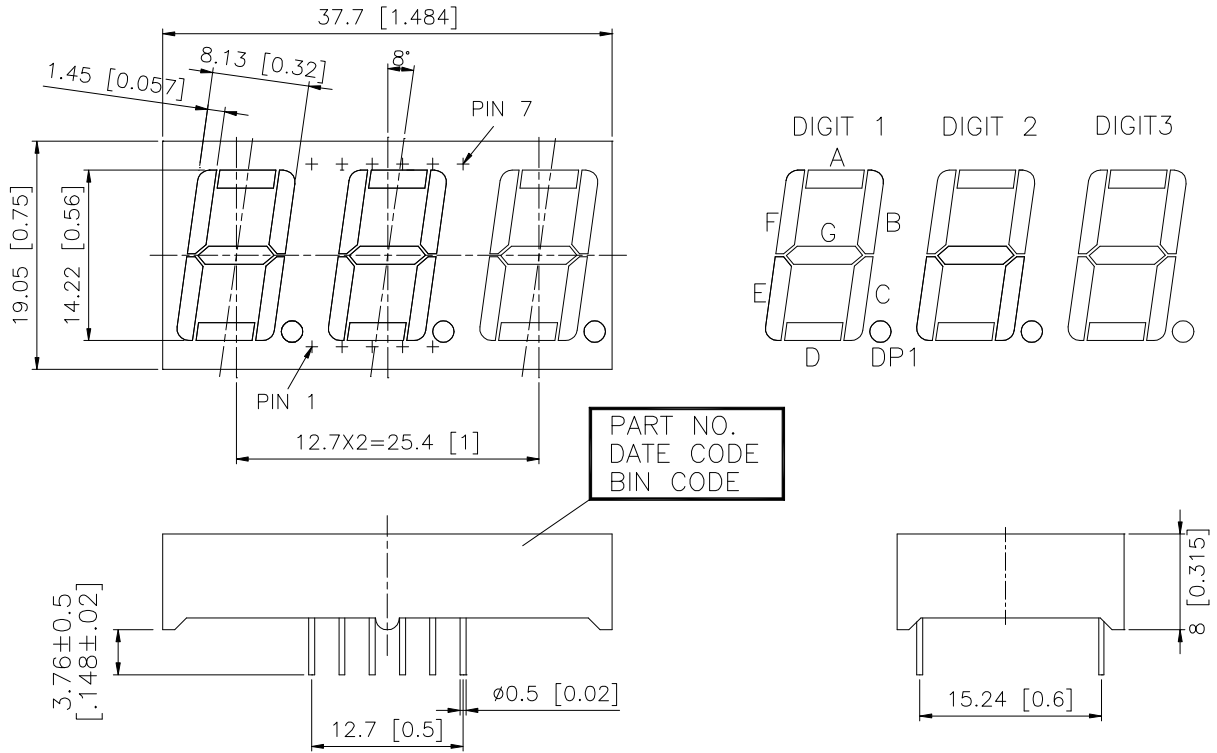
The LTC-561JG-J is a 0.56 inch (14.2 mm) digit height triple digit seven-segment display. This device utilizes AlInGaP Green LED chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a gray face and white segments.

This low current seven-segment display is designed to perform under low power consumption. It is tested and selected for its excellent low current characteristics. It can be driven in low current condition and the segments are matched. This driving current as low as 1mA per segment is applicable.

DEVICE

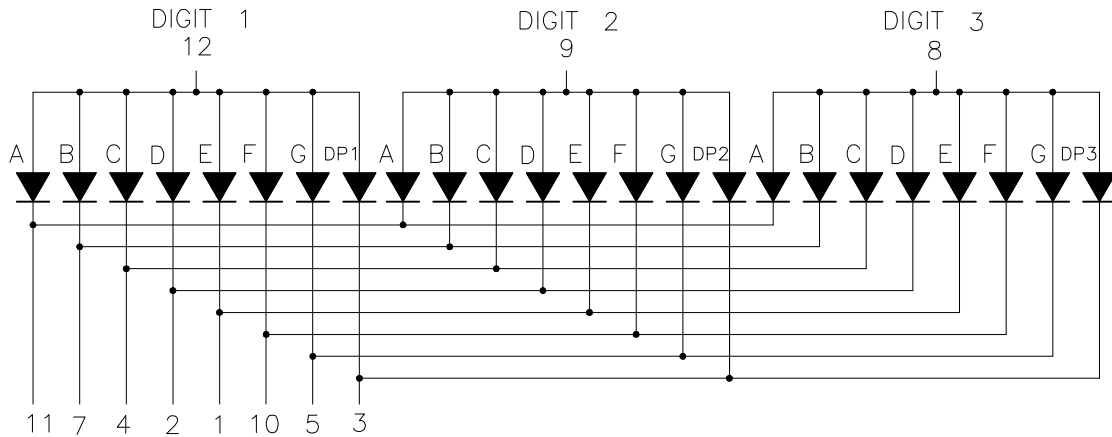
PART NO.	DESCRIPTION
AlInGaP GREEN	Multiplex Common Anode
LTC-561JG-J	Rt. Hand Decimal

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.

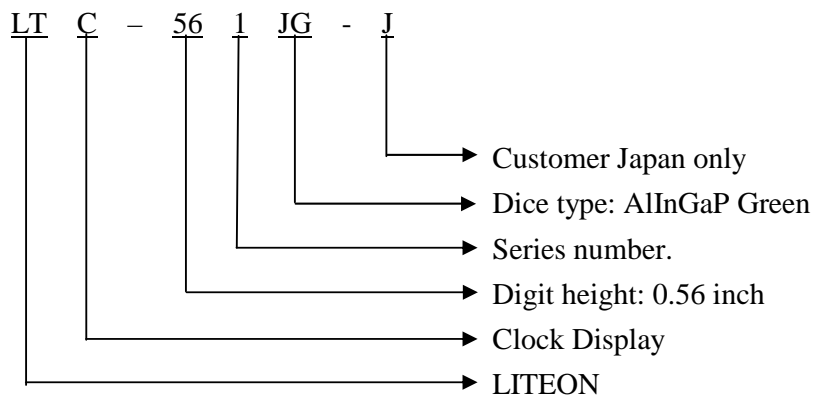
INTERNAL CIRCUIT DIAGRAM



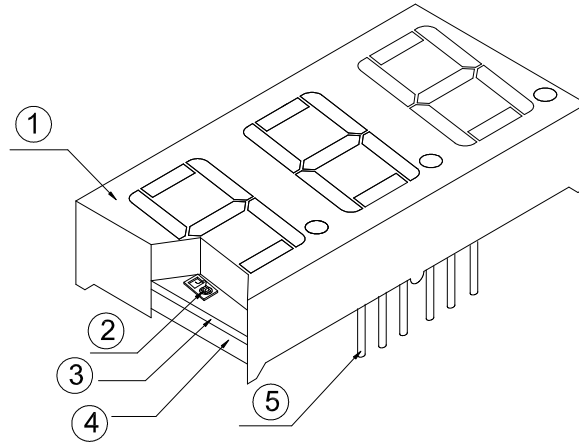
PIN CONNECTION

NO.	CONNECTION
1	CATHODE E
2	CATHODE D
3	CATHODE D.P.
4	CATHODE C
5	CATHODE G
6	NO CONNECTION
7	CATHODE B
8	COMMON ANODE, DIGIT 3
9	COMMON ANODE, DIGIT 2
10	CATHODE F
11	CATHODE A
12	COMMON ANODE, DIGIT 1

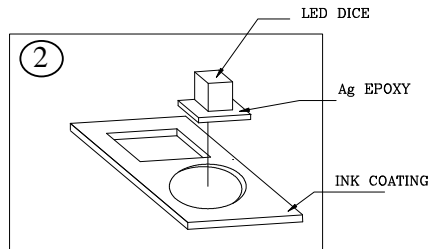
Explanation for Part Number



Cross Section & Material List.



- 1. Ag CONDUTIVE EPOXY USING
- 2. ON THE PCB, COATING A LAYER OF INK FOR CONTROLLING THE Ag EPOXY SCOPE



No.	Items	Material
1	Reflector	Polycarbonate
2	LED chip	AlInGaP GREEN
3	PCB	Resin + Glass + Fiber
4	Epoxy	Resin
5	Round pin	Cu + Fe + Sn

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Property of Lite-On Only

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°C Per Segment	0.28	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Soldering 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	251	900 7555		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	569	572	575	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.

BIN TABLE 2/1	BIN RANK TABLE							μcd I _F =1mA
BIN GRAD	E2	F1	F2	G1	G2	H1	H2	
RANG	251~320	321~400	401~500	501~630	631~800	801~1020	1021~1300	

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BNS-OD-C131/A4

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

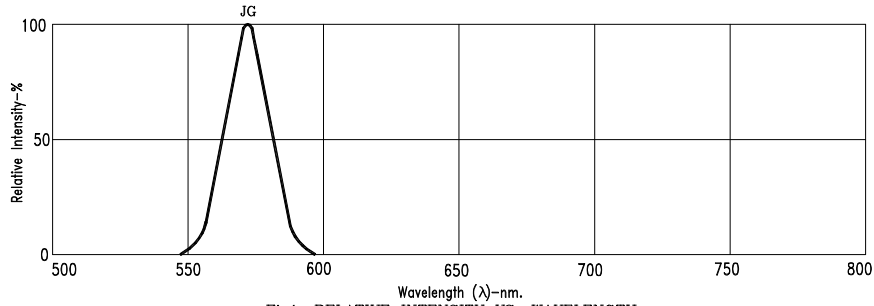


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

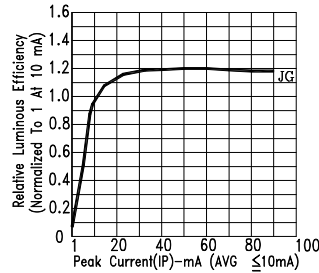


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT

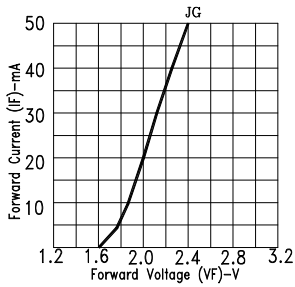


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

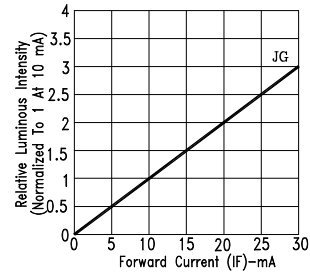


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

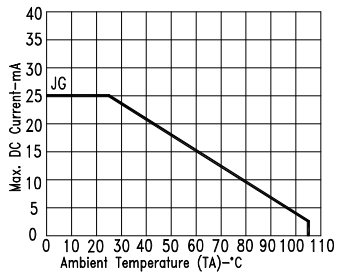


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

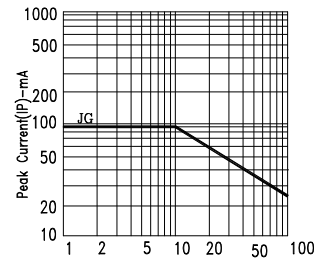


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE : JG=AlInGaP GREEN

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The Packing spec

ONINNER CARTON

	MATERIAL NO. : LTC-56DGJ	BATCH : G
	QUANTITY : 165	
	CLSPN : 06B	MACHINE :
	DATE CODE : 06B	FBFREE

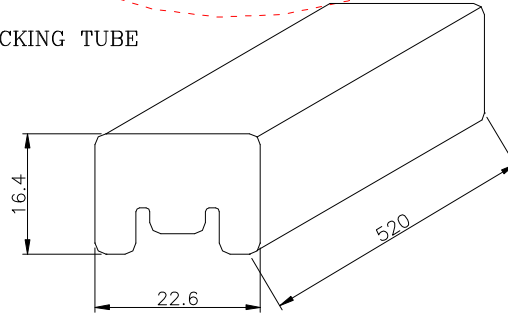
2016/12/23 12:22:29

LITEON FINISHED GOODS STOCK LABEL

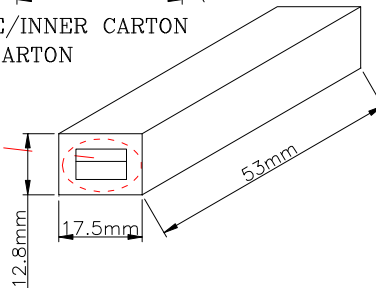
TAGNO. : T025085	
CUSTOMER : SHARP	
CLSPARTNO. :	
MATERIAL GROUP : 08800HG	
MATERIAL NO. : LTC-56DGJ	
BATCH : G	
QUANTITY : 50	
DATE CODE : 06B	
COMMENT : REF	SHELF : BA1

TSC09 2016/03/23 13:52

13 PCS/PACKING TUBE



55 PACKING TUBE/INNER CARTON
715 PCS/INNER CARTON



4 INNER CARTON/OUTER CARTON
2860 PCS/OUTER CARTON

