LITEON®
OPTOELECTRONICS

LED Display

Product Data Sheet

LTC-3743G

Spec No.: DS30-2008-0112

Effective Date: 06/07/2008

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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FEATURES

∗0.3 inch (7.4 mm) DIGIT HEIGHT
∗CONTINUOUS UNIFORM SEGMENTS
∗LOW POWER REQUIREMEN
∗EXCELLENT CHARACTERS APPEARANCE
∗HIGH BRIGHTNESS & HIGH CONTRAST
∗WIDE VIEWING ANGLE
∗SOLID STATE RELIABILITY
∗**LEAD-FREE PACKAGE(ACCORDING TO ROHS)**

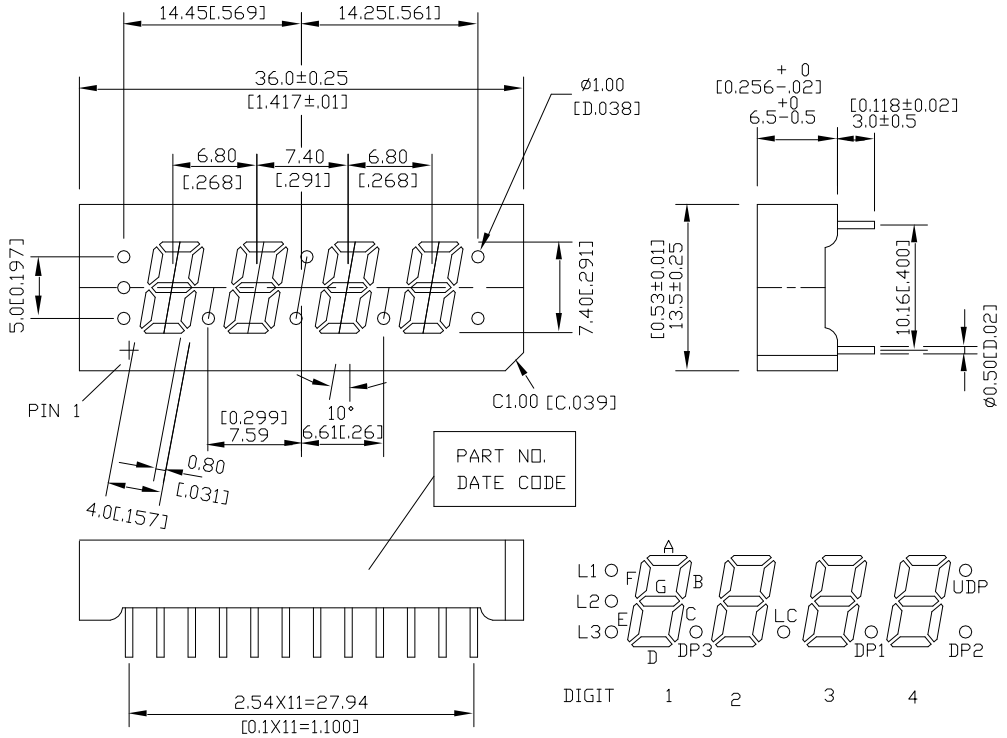
DESCRIPTION

The LTC-3743G is a 0.3 inch (7.4 mm) digit height quadruple display. This device utilizes green LED chips, which are made from GaP on a transparent GaP substrate, and has a black face and white segments.

DEVICE

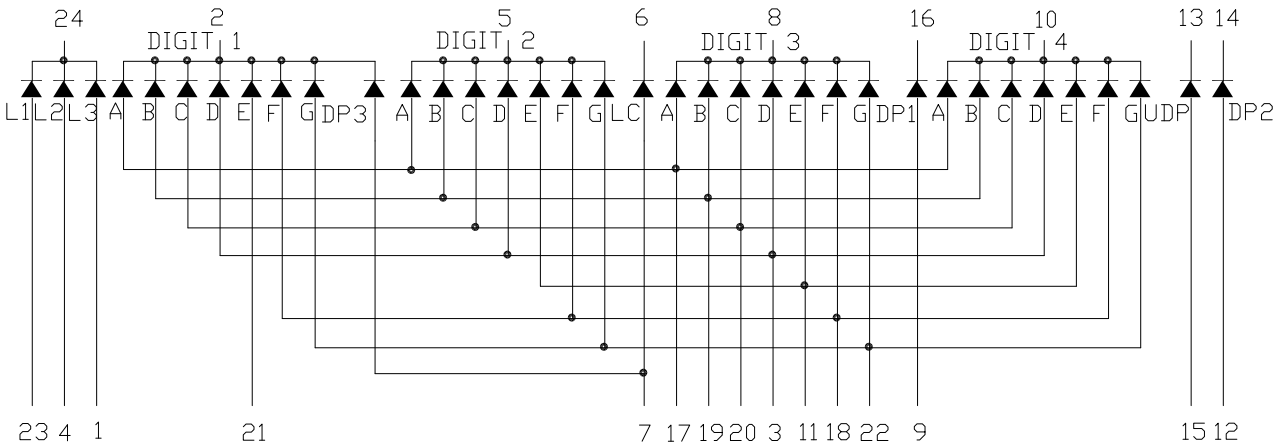
PART NO.	DESCRIPTION
GREEN	Multiplex Common Cathode
LTC-3743G	Rt. Hand Decimal

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 L3	13.	CATHODE UDP
2.	CATHODE (DIGIT 1&DP3)	14	CATHODE DP2
3.	ANODE D	15.	ANODE UDP
4.	ANODE L2	16.	CATHODE DP1
5.	CATHODE (DIGIT 2)	17.	ANODE A
6.	CATHODE LC	18	ANODE F
7.	ANODE LC & DP3	19.	ANODE B
8	CATHODE (DIGIT 3)	20.	ANODE C
9.	ANODE DP1	21.	ANODE 1E
10.	CATHODE (DIGIT 4)	22.	ANODE G
11.	ANODE E	23.	ANODE L1
12.	ANODE DP2	24.	CATHODE L1,L2,L3

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	100	mA
Continuous Forward Current Per Segment Derating Linear From 25℃ Per Segment	25 0.28	mA mA/℃
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35℃ to +105℃	
Storage Temperature Range	-35℃ to +105℃	
Solder Temperature: max 260℃ for max 3sec at 1.6mm below seating plane.		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	500	1600		μcd	I_F=10mA
Peak Emission Wavelength	λp		565		nm	I_F=20mA
Spectral Line Half-Width	Δλ		30		nm	I_F=20mA
Dominant Wavelength	λd		569		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=10mA

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)

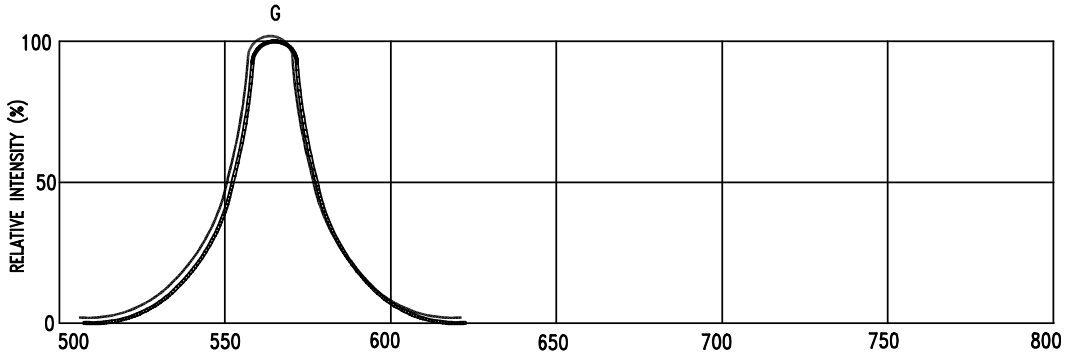


Fig1.Spectral Emission

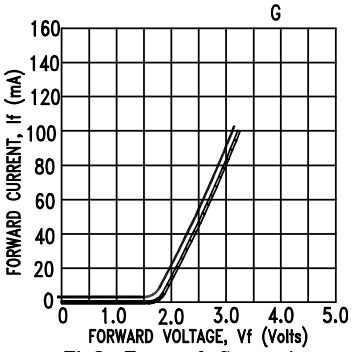


Fig2. Forward Current vs. Forward Voltage

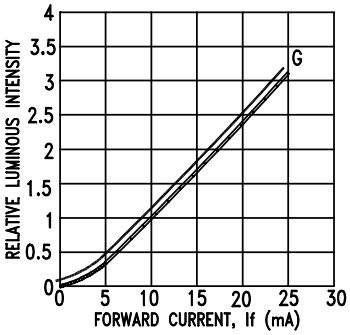


Fig3. Relative Luminous Intensity vs. DC Forward Current

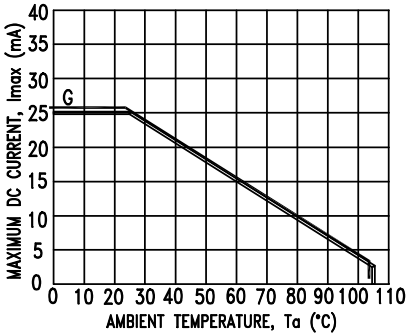


Fig4. Maximun Allowable DC Current vs. Ambient Temperature

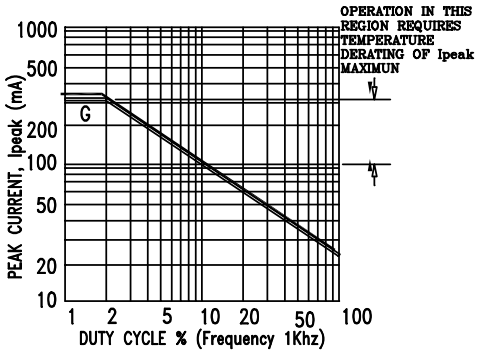


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE: G=GREEN.