



LED Display

Product Data Sheet

LTC-5688G-01

Spec No.: DS30-2006-164

Effective Date: 06/19/2012

Revision: A

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

FEATURES

- * 0.56 inch (14.22 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**

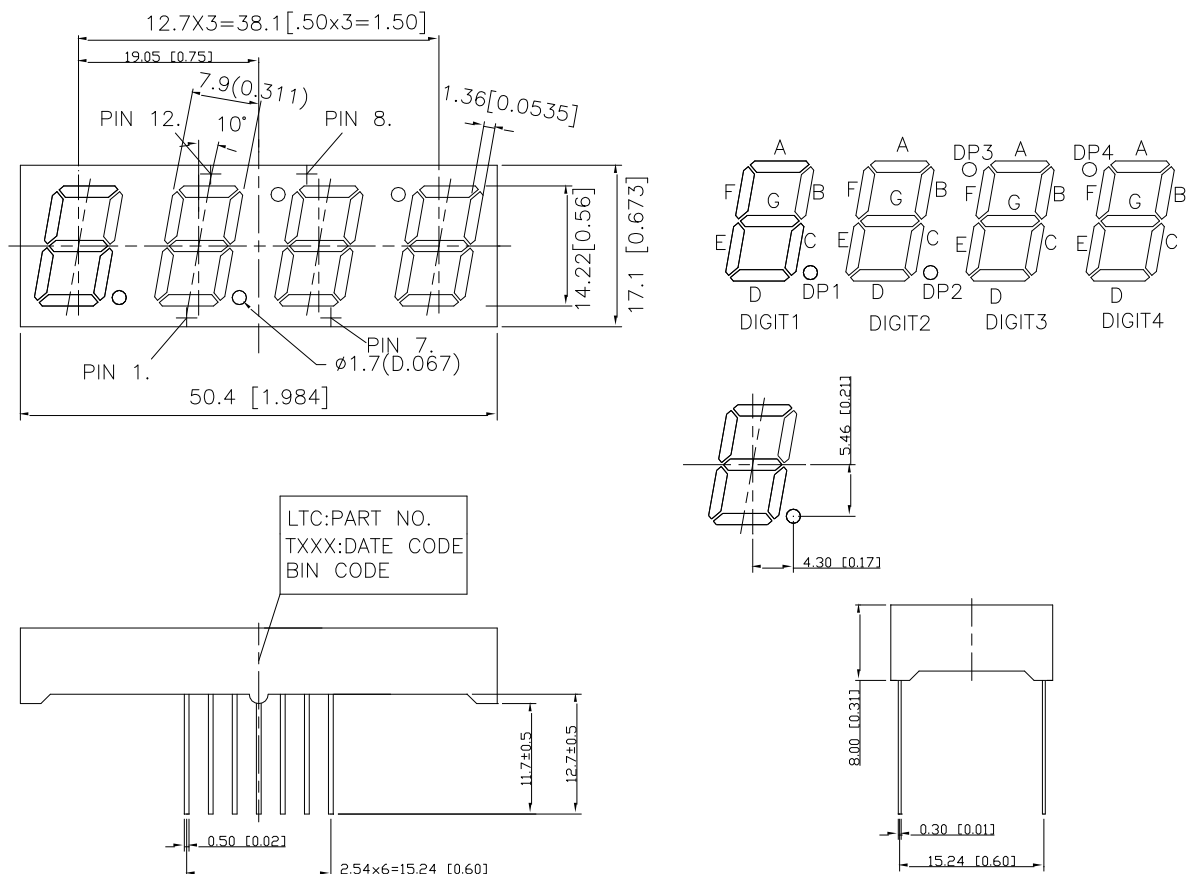
DESCRIPTION

The LTC-5688G-01 is a 0.56 inch (14.22 mm) digit height quad digit seven-segment display. This device uses GREEN LED chips (GaP epi on GaP substrate). The display has a light gray face and green segments.

DEVICE

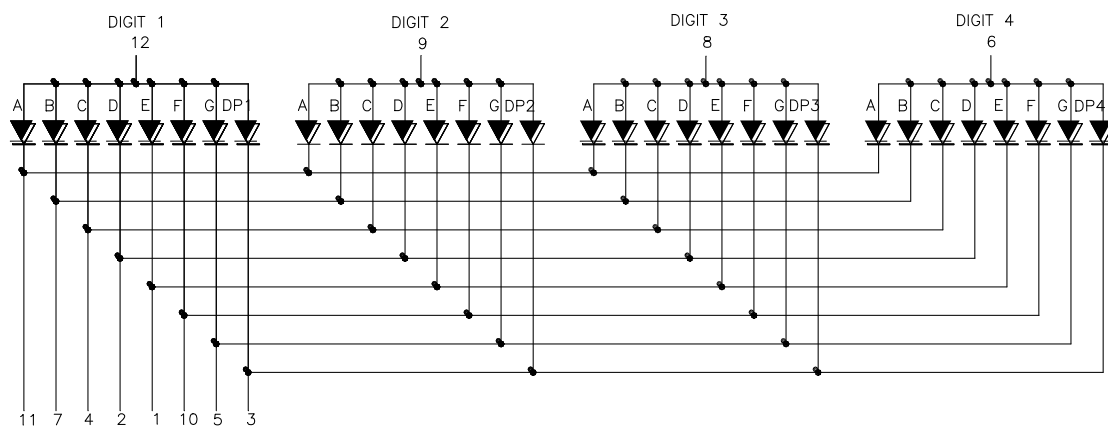
PART NO.	DESCRIPTION
GREEN	Common Anode
LTC-5688G-01	Rt. Hand Decimal

PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
1	Cathode E
2	Cathode D
3	Cathode D.P.
4	Cathode C
5	Cathode G
6	Common Anode (Digit 4)
7	Cathode B
8	Common Anode (Digit 3)
9	Common Anode (Digit 2)
10	Cathode F
11	Cathode A
12	Common Anode (Digit 1)

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	25	mA
Forward Current Derating from 25 ⁰ C	0.28	mA/ ⁰ C
Operating Temperature Range	-35 ⁰ C to +105 ⁰ C	
Storage Temperature Range	-35 ⁰ C to +105 ⁰ C	
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260 ⁰ C		

*See figure 5 to establish pulsed condition

ELECTRICAL / OPTICAL CHARACTERISTICS AT T_A=25⁰C

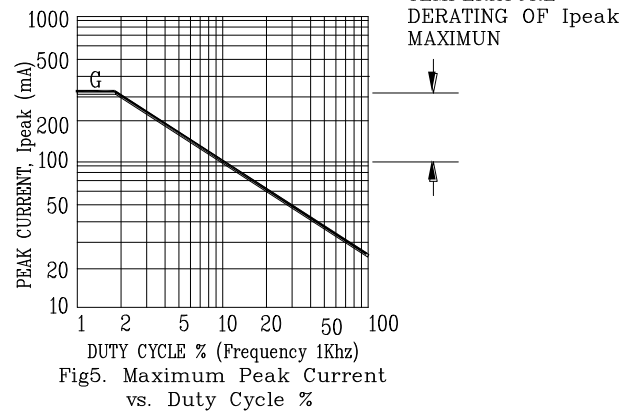
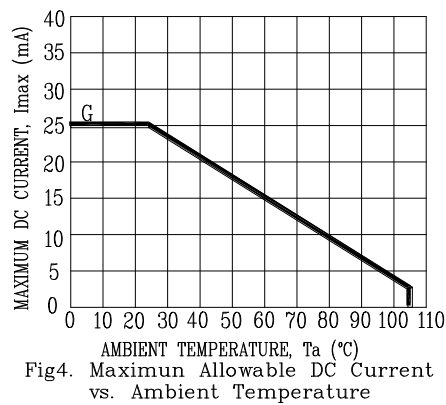
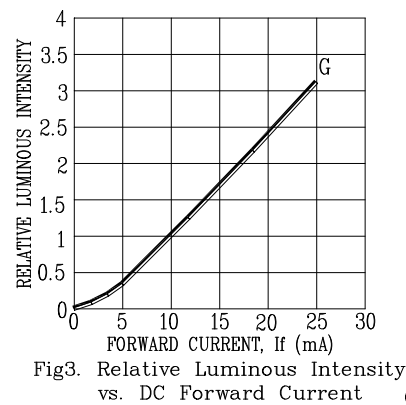
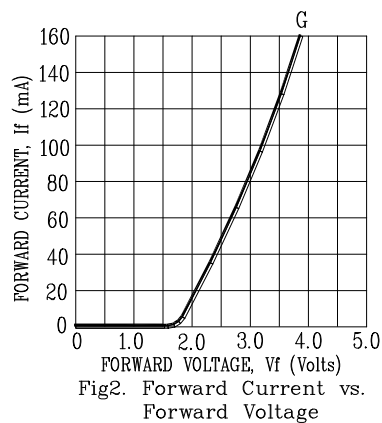
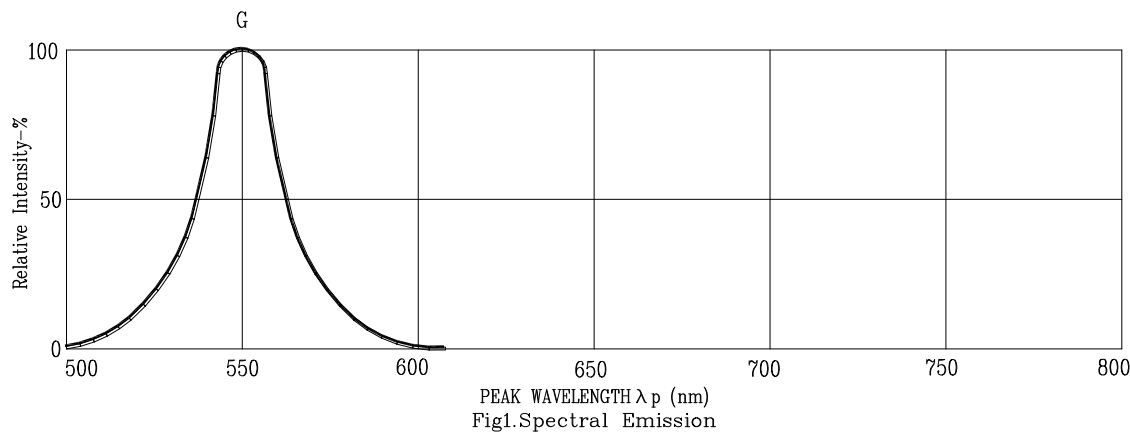
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	*1300	2400		μcd	I _F =10mA
Peak Emission Wavelength	λ _p		565		nm	I _F =20mA
Spectral Line Half-Width	Δλ		30		nm	I _F =20mA
Dominant Wavelength	λ _d		569		nm	I _F =20mA
Forward Voltage Per Segment	V _F		2.1	2.6	V	I _F =20mA
Reverse Current Per Segment	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio	I _v -m			2:1		I _F =10mA

*BIN H, I only

- Note: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (commission international DE L'clairiage) eye-response curve.
2. Reverse voltage is only for IR test. It can not continue to operate at this situation.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: G=STD GREEN