



# **LED Display**

## **Product Data Sheet**

### **LTC-5769G-01J**

Spec No.: DS30-2008-0025

Effective Date: 05/28/2008

Revision: A

**LITE-ON DCC**

**RELEASE**

**BNS-OD-FC001/A4**

**FEATURES**

- \* 0.56 INCH (14.22 mm) DIGIT HEIGHT.
- \* CONTINUOUS UNIFORM SEGMENTS.
- \* SUSTAIN UNDER HIGH TEMPERATURE
- \* LOW POWER REQUIREMENT.
- \* EXCELLENT CHARACTERS APPEARANCE.
- \* HIGH BRIGHTNESS & HIGH CONTRAST.
- \* WIDE VIEWING ANGLE.
- \* SOLID STATE RELIABILITY.
- \* **LEAD-FREE PACKAGE** (ACCORDING TO RoHS).

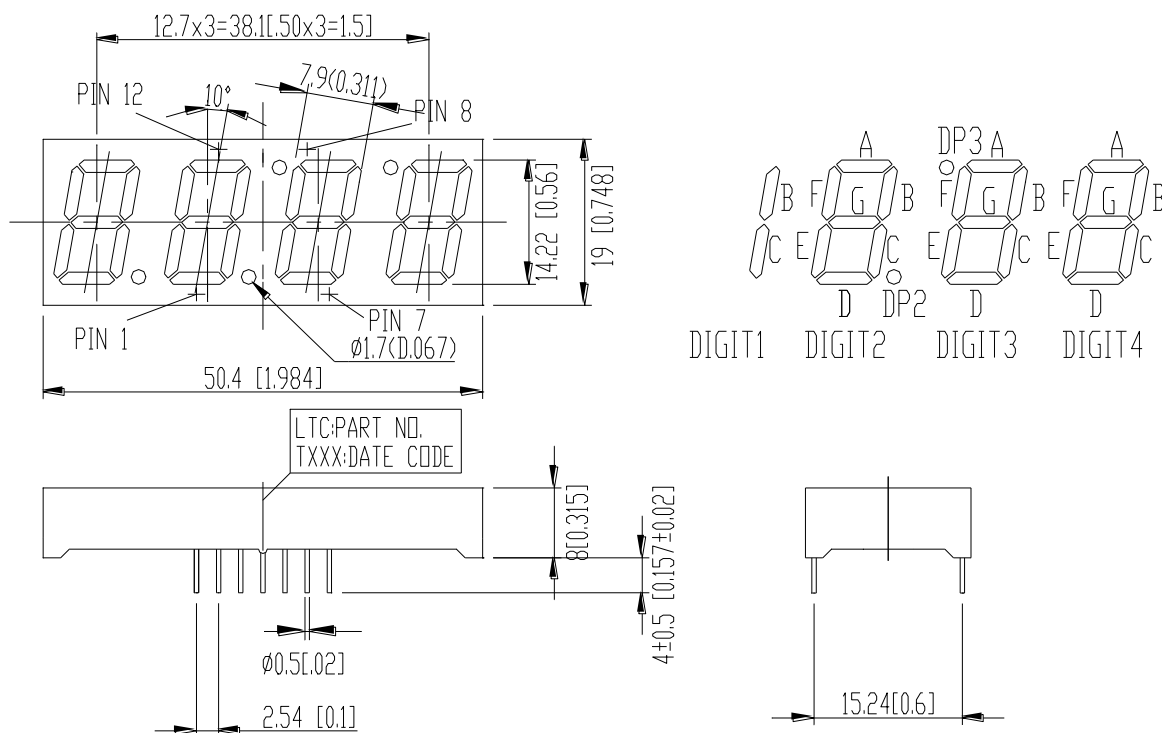
**DESCRIPTION**

The LTC-5769G-01J is a 0.56 inch (14.22 mm) height seven-segment display. This device utilizes green LED chips, which are made from GaP on a transparent GaP substrate and SMT epoxy, and has a light gray face and green segments.

**DEVICE**

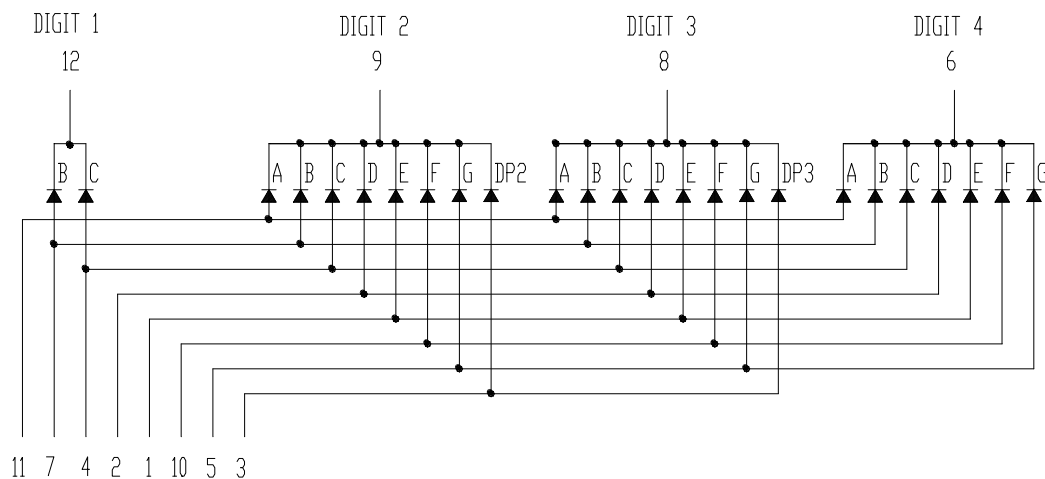
PART NO.	DESCRIPTION
GREEN	Common Cathode R.t Hand Decimal
LTC-5769G-01J	

# **PACKAGE DIMENSIONS**



- NOTES: 1. All dimensions are in millimeters. Tolerances are  $\pm 0.25$  mm unless otherwise noted.
2. Pin tip's shift tolerance is  $\pm 0.4$  mm.

# **INTERNAL CIRCUIT DIAGRAM**



**PIN CONNECTION**

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

**ABSOLUTE MAXIMUM RATING**

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment ( 1/10 Duty Cycle, 0.1ms Pulse Width )	100	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25 <sup>0</sup> C Per Segment	0.28	mA/ <sup>0</sup> C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35 <sup>0</sup> C to +105 <sup>0</sup> C	
Storage Temperature Range	-35 <sup>0</sup> C to +105 <sup>0</sup> C	
Solder Temperature 1/16 inch Below Seating Plane for 5 Seconds at 260 <sup>0</sup> C		

\* see figure 5 to establish pulsed condition

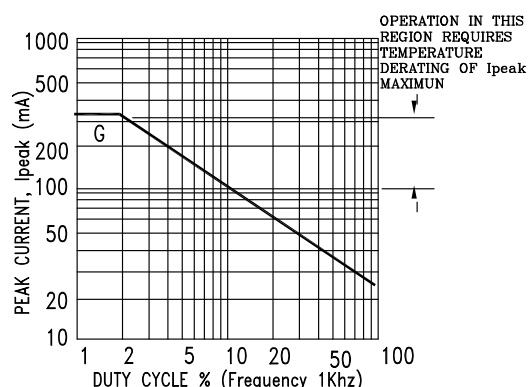
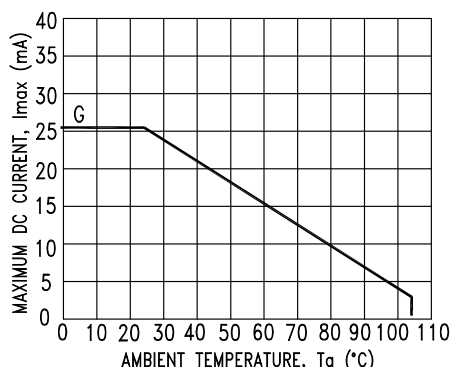
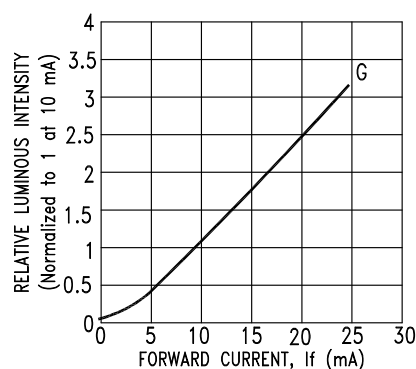
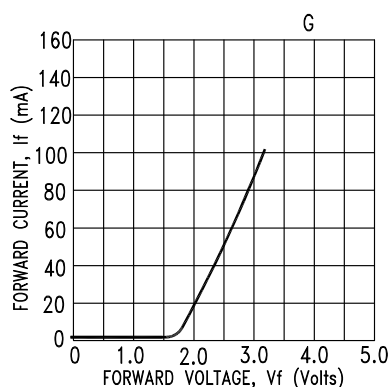
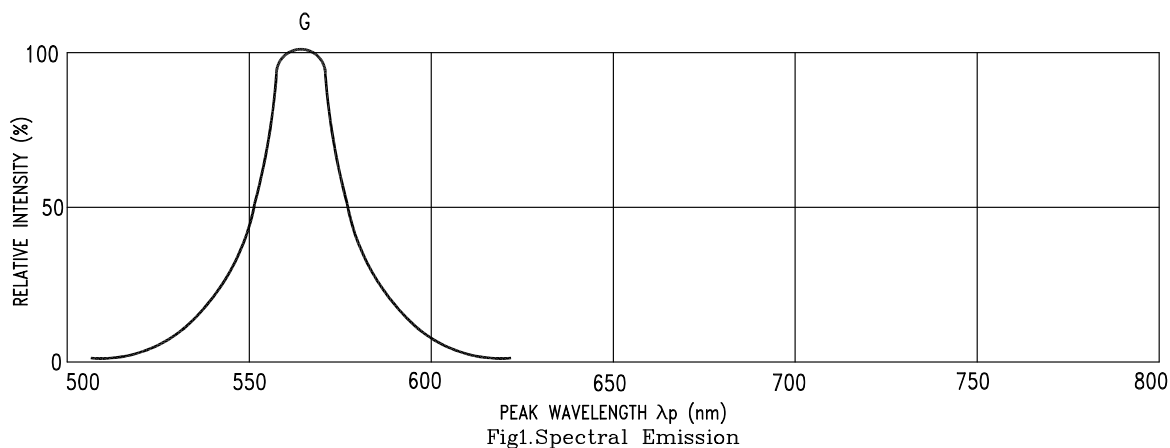
**ELECTRICAL / OPTICAL CHARACTERISTICS AT T<sub>A</sub>=25<sup>0</sup>C**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	800	2400		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		565		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		30		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		569		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	V <sub>F</sub>		2.1	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio (Similar Light Area)	I <sub>v-m</sub>			2:1		I <sub>F</sub> =10mA

Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (commission international De L'Eclairage) eye-response curve.

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: G=GREEN.