

## LITEON TECHNOLOGY CORPORATION

### Property of Lite-On Only

### **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-02 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**

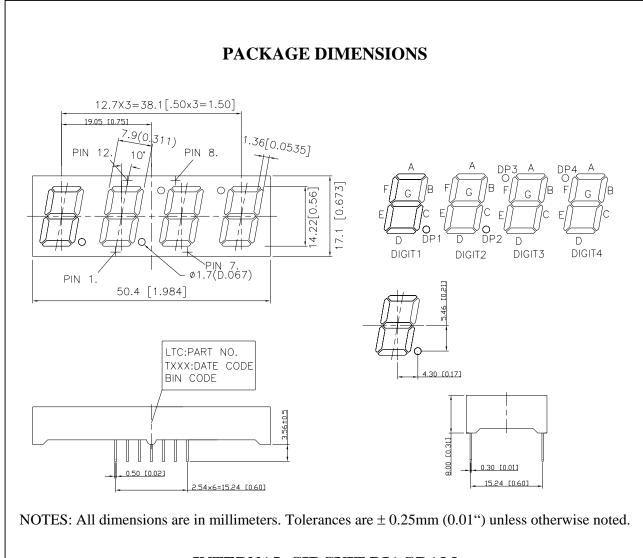
PART NO.	DESCRIPTION
GREEN	Common Anode
LTC-5688G-02	Rt. Hand Decimal

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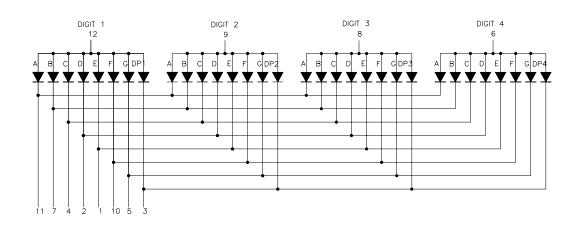


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### INTERNAL CIRCUIT DIAGRAM



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### 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)		

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### 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 <sup>o</sup> C	0.28	mA/ <sup>0</sup> C			
Reverse Voltage Per Segment	5	V			
Operating Temperature Range -35°C to +105°C					
Storage Temperature Range	Temperature Range $-35^{\circ}$ C to $+105^{\circ}$ C				
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260 <sup>o</sup> C					

<sup>\*</sup>See figure 5 to establish pulsed condition

### ELECTRICAL / OPTICAL CHARACTERISTICS AT T<sub>A</sub>=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	*1300	2400		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λр		565		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		30		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λd		569		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	VF		2.1	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	Ir			100	μΑ	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio	Iv-m			2:1		I <sub>F</sub> =10mA

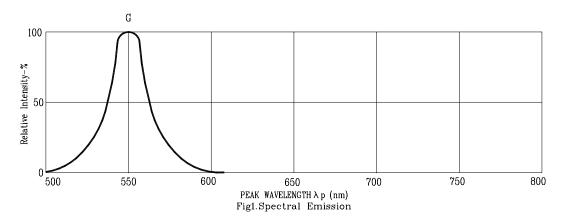
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (commission international DE L'clariage) eye-response curve.

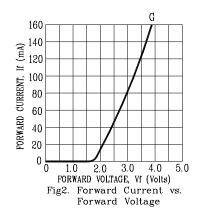
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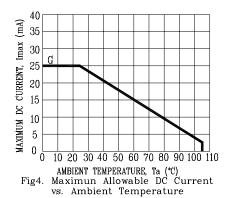
<sup>\*</sup>Just ship out BIN G,H,I. degree goods.

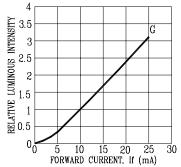
### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

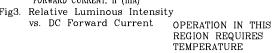
(25°C Ambient Temperature Unless Otherwise Noted)



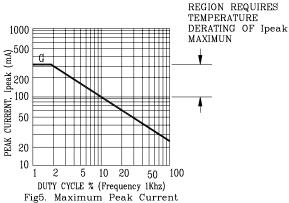








vs. Duty Cycle %



NOTE: G=STD GREEN

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