Property of Lite-On Only

FEATURES

- *0.276 inch (7 mm) DIGIT HEIGHT
- *EXCELLENT SEGMENT UNIFORMITY
- ***LOW POWER REQUIREMENT**
- *HIGH BRIGHTNESS AND HIGH CONTRAST
- *WIDE VIEWING ANGLE
- *** SOLID STATE RELIABILITY**
- *BINNED FOR LUMINOUS INTENSITY
- *LEAD-FREE PACKAGE

DESCRIPTION

The LTC-2810HG is a 0.276 inch (7 mm) digit height triple digit display. This device uses GREEN LED chips (GaP epi on GaP substrate). The display has gray face and white segments.

DEVICE

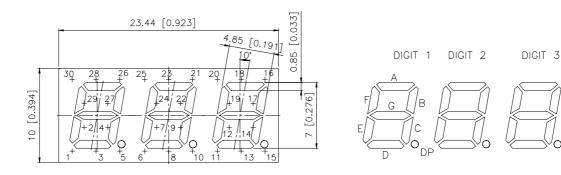
PART NO.	DESCRIPTION			
GREEN	Common Anode			
LTC-2810HG	Rt. Hand Decimal			

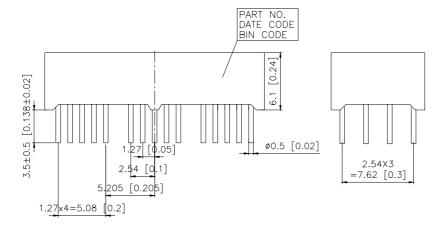
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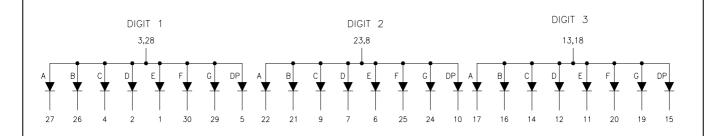
PACKAGE DIMENSIONS





NOTES: 1.All dimensions are in millimeters. Tolerances are \pm 0.25 mm (0.01") unless otherwise noted. 2.Pin tip's shift tolerance is \pm 0.4 mm.

INTERNAL CIRCUIT DIAGRAM



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PIN CONNECTION

NO.	CONNECTION	NO.	CONNECTION		
1	Cathode E (DIGIT 1)	16	Cathode B (DIGIT 3)		
2	Cathode D (DIGIT 1)	17	Cathode A (DIGIT 3)		
3	Common Anode Digit 1	18	Common Anode Digit 3		
4	Cathode C (DIGIT 1)	19	Cathode G (DIGIT 3)		
5	Cathode DP (DIGIT 1)	20	Cathode F (DIGIT 3)		
6	Cathode E (DIGIT 2)	21	Cathode B (DIGIT 2)		
7	Cathode D (DIGIT 2)	22	Cathode A (DIGIT 2)		
8	Common Anode Digit 2	23	Common Anode Digit 2		
9	Cathode C (DIGIT 2)	24	Cathode G (DIGIT 2)		
10	Cathode DP(DIGIT 2)	25	Cathode F (DIGIT 2)		
11	Cathode E (DIGIT 3)	26	Cathode B (DIGIT 1)		
12	Cathode D (DIGIT 3)	27	Cathode A (DIGIT 1)		
13	Common Anode Digit 3	28	Common Anode Digit 1		
14	Cathode C (DIGIT 3)	29	Cathode G (DIGIT1)		
15	Cathode DP (DIGIT 3)	30	Cathode F (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		
Derating Linear From 25°C Per Segment	0.33	mA/°C		
Reverse Voltage Per Segment	5	V		
Operating Temperature Range	-35° C to $+105^{\circ}$ 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	Iv	800	2600		μcd	I _F =10mA
Peak Emission Wavelength	λρ		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	VF		2.1	2.6	V	I _F =20mA
Reverse Current Per Segment	IR			100	μΑ	V _R =5V
Luminous Intensity Matching Ratio (Similar Light Area)	Iv-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.

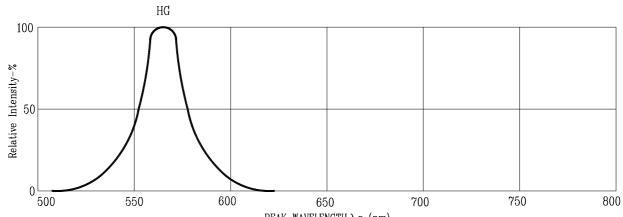
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^{*} see figure 5 to establish pulsed condition

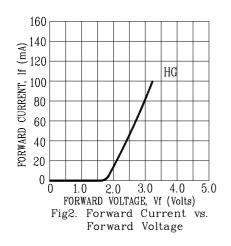
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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



PEAK WAVELENGTH λp (nm) Fig1.Spectral Emission



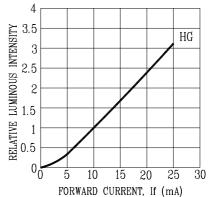
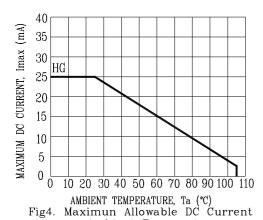
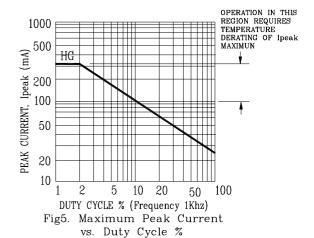


Fig3. Relative Luminous Intensity vs. DC Forward Current





NOTE: HG=GREEN

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vs. Ambient Temperature

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