



Spec No.: DS30-2005-183 Effective Date: 10/06/2005

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

Property of LITE-ON Only

FEATURES

- *0.56 inch (14.25 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(ACCORDING TO ROHS)

DESCRIPTION

The LTS-5824G is a 0.56 inch (14.25 mm) digit height single digit display. This device uses GREEN LED chips (GaP epi on GaP substrate). The display has black face and white segments.

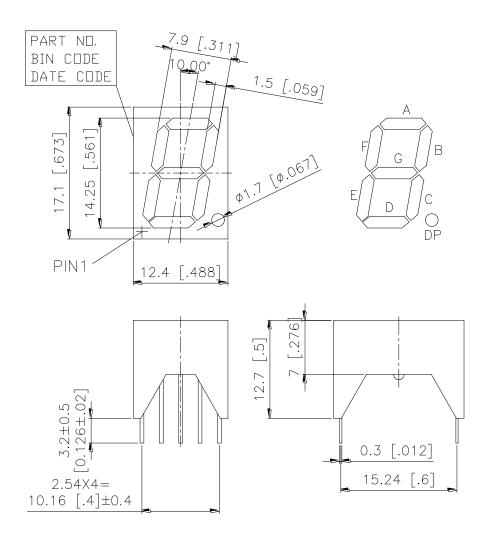
DEVICE

PART NO.	DESCRIPTION			
GREEN	Common Anode			
LTS-5824G	Rt. Hand Decimal			

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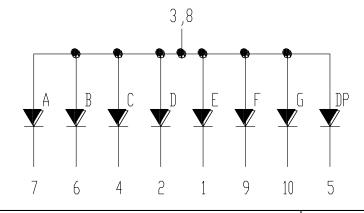
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PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



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PIN CONNECTION

No	CONNECTION			
1	Cathode E			
2	Cathode D			
3	Common Anode			
4	Cathode C			
5	Cathode DP			
6	Cathode B			
7	Cathode A			
8	Common Anode			
9	Cathode F			
10	Cathode G			

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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 ^o C	0.33	mA/ ⁰ C				
Reverse Voltage Per Segment	5	V				
Operating Temperature Range	-35^{0} C to $+85^{0}$ C					
Storage Temperature Range	ture Range -35°C to +85°C					
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260 ^o C						

^{*} see figure 5 to establish pulsed condition

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN	ТҮР	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	Iv	800	2400		μcd	$I_F = 10 \text{mA}$
Peak Emission Wavelength	λρ		565		nm	$I_F = 20 \text{mA}$
Spectral Line Half-Width	Δλ		30		nm	$I_F = 20 \text{mA}$
Dominant Wavelength	λd		569		nm	$I_F = 20 \text{mA}$
Forward Voltage Per Segment	V_{F}		2.1	2.6	V	$I_F = 20 \text{mA}$
Reverse Current Per Segment	Ir			100	μΑ	$V_R = 5V$
Luminous Intensity Matching Ratio (Similar Light Area)	Iv-m			2:1		I _F = 10mA

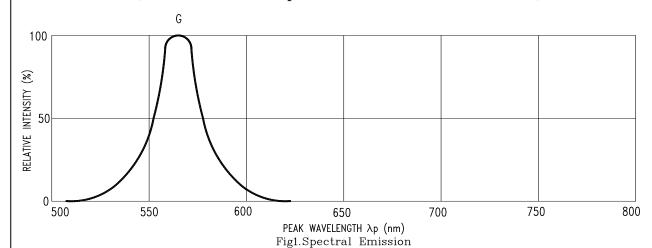
Note: Luminous Intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

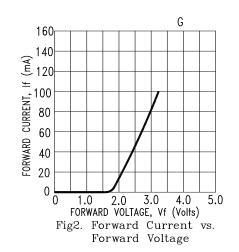
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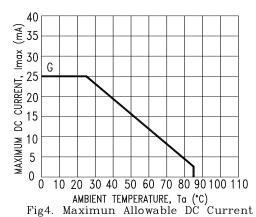
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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)







vs. Ambient Temperature

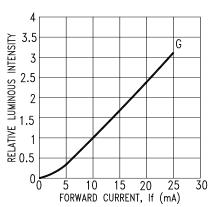
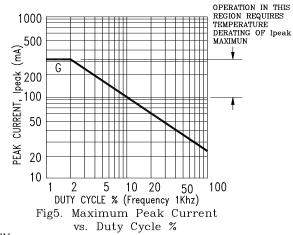


Fig3. Relative Luminous Intensity vs. DC Forward Current



NOTE: G = GREEN.

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