



LED Display

Product Data Sheet

LTC-5836HR

Spec No.: DS30-2002-035

Effective Date: 03/27/2002

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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FEATURES

- * 0.52 inch (13.2 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.

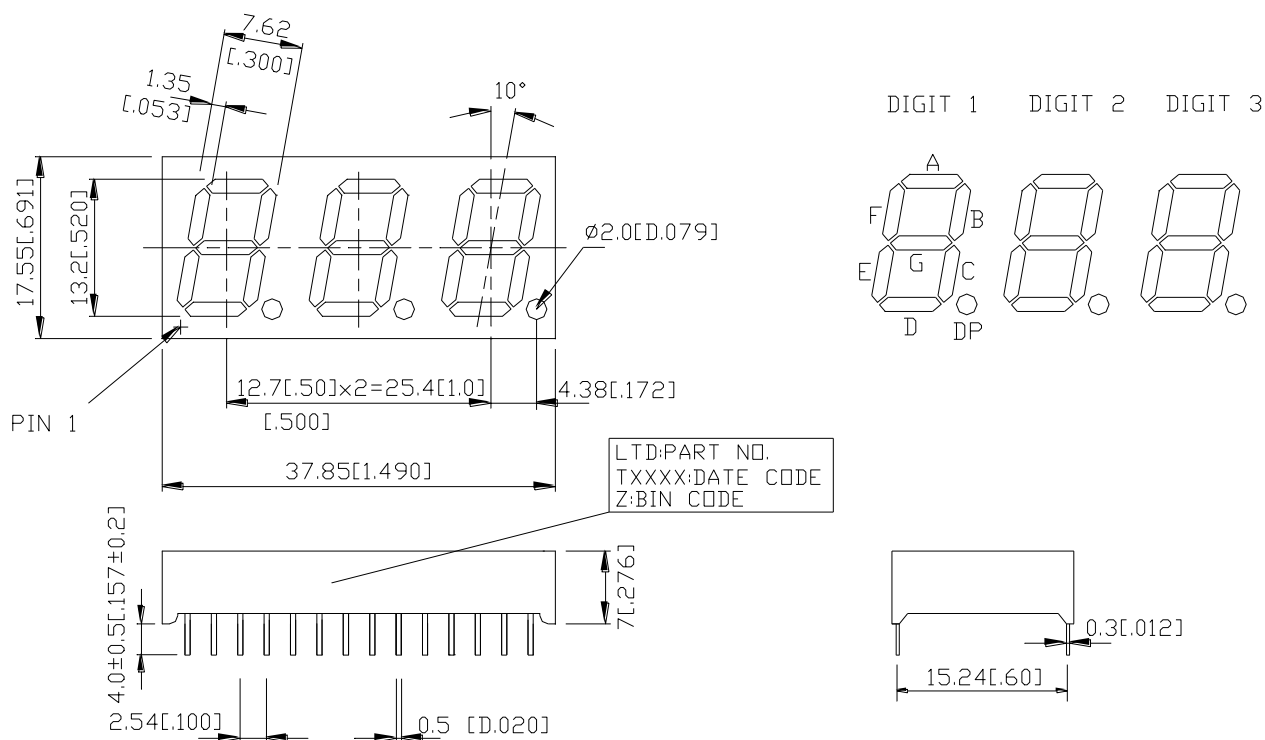
DESCRIPTION

The LTC-5836HR is a 0.52 inch (13.2 mm) digit height triple digit seven-segment display. This device utilizes High Efficiency Red LED chips, which are made from GaAsP on GaP substrate, and has a red face and red segments.

DEVICE

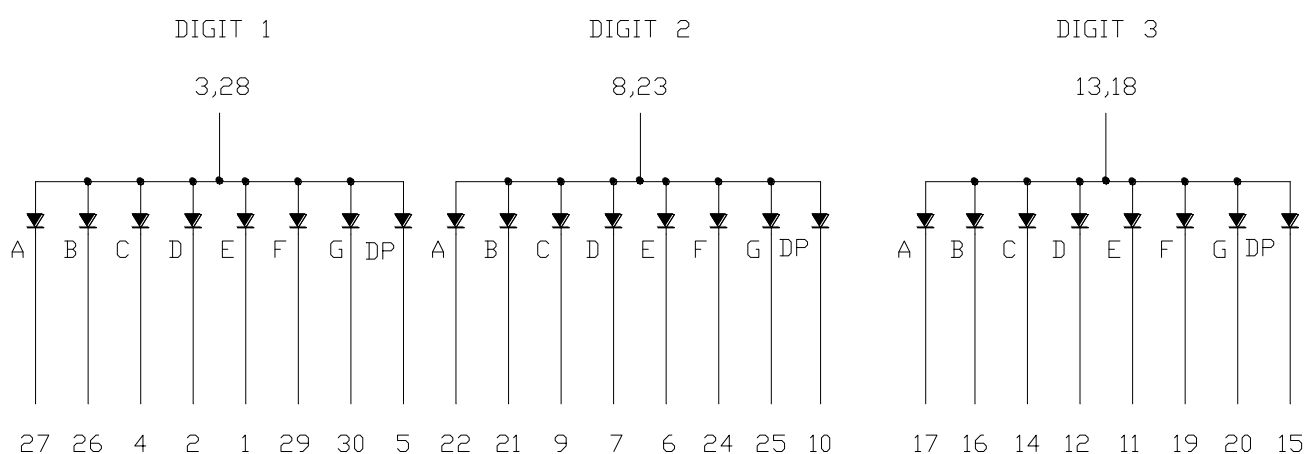
PART NO.	DESCRIPTION
Hi-Eff. Red	Common Anode Rt. Hand Decimal
LTC-5836HR	

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



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 F (DIGIT 3)
5	CATHODE D.P. (DIGIT 1)	20	CATHODE G (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 F (DIGIT 2)
10	CATHODE D.P. (DIGIT 2)	25	CATHODE G (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 F (DIGIT 1)
15	CATHODE D.P. (DIGIT 3)	30	CATHODE G (DIGIT 1)

ABSOLUTE MAXIMUM RATING AT Ta=25°C

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°C Per Segment	0.33	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°C	
Solder Temperature: max 260°C for max 3sec at 1.6mm below seating plane.		

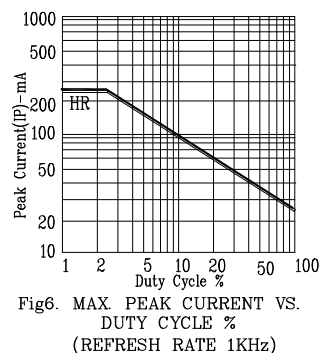
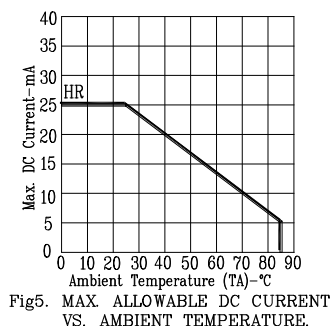
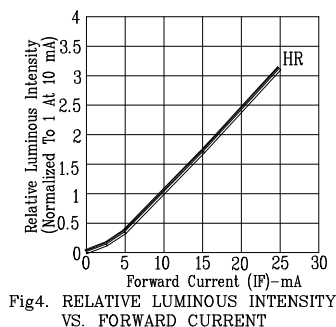
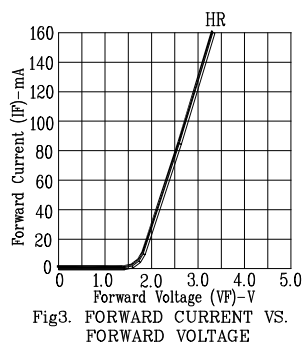
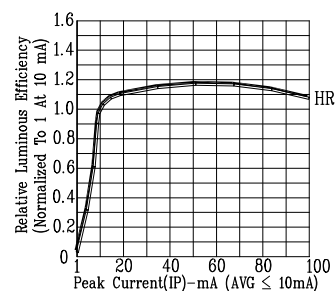
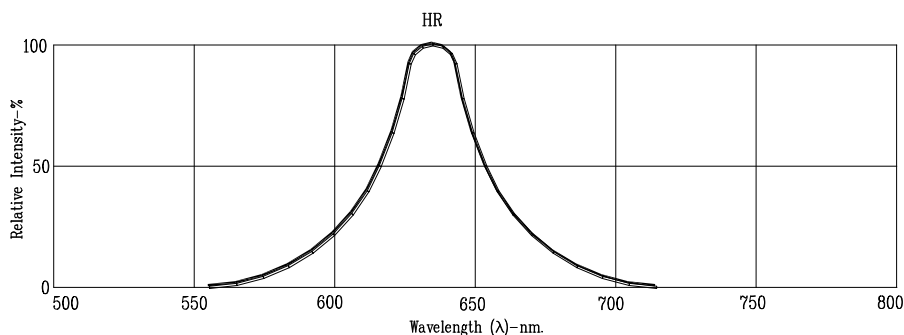
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	800	2200		μcd	I _F =10mA
Peak Emission Wavelength	λ _p		635		nm	I _F =20mA
Spectral Line Half-Width	Δλ		40		nm	I _F =20mA
Dominant Wavelength	λ _d		623		nm	I _F =20mA
Forward Voltage Per Segment	V _F		2.0	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

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

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: HR=HL - EFF. RED