



LED Display

Product Data Sheet

LTC-5653HR

Spec No.: DS-30-99-102

Effective Date: 12/24/2008

Revision: A

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LITE-ON Technology Corp. / Optoelectronics

No.90,Chien 1 Road, Chung Ho, New Taipei City 23585, Taiwan, R.O.C.

Tel: 886-2-2222-6181 Fax: 886-2-2221-1948 / 886-2-2221-0660

<http://www.liteon.com/opto>

LED DISPLAY**LTC-5653HR****DATA SHEET**

Rev	Description	By
01	ORIGINAL (Refer to contour drawing Revision (-))	
(Above data for PD and Customer tracking only)		
-	NPPR Received and Upload on OPNC	Vanessa 4/11/2000
A	Add width dimension of reflector	KITTISAK B. Nov 28/08

SPEC. NO.: DS-30-99-102D A T E : Nov 28/08REV. NO. : APAGE NO. : 0 OF 6

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 (ACCORDING TO ROHS).**

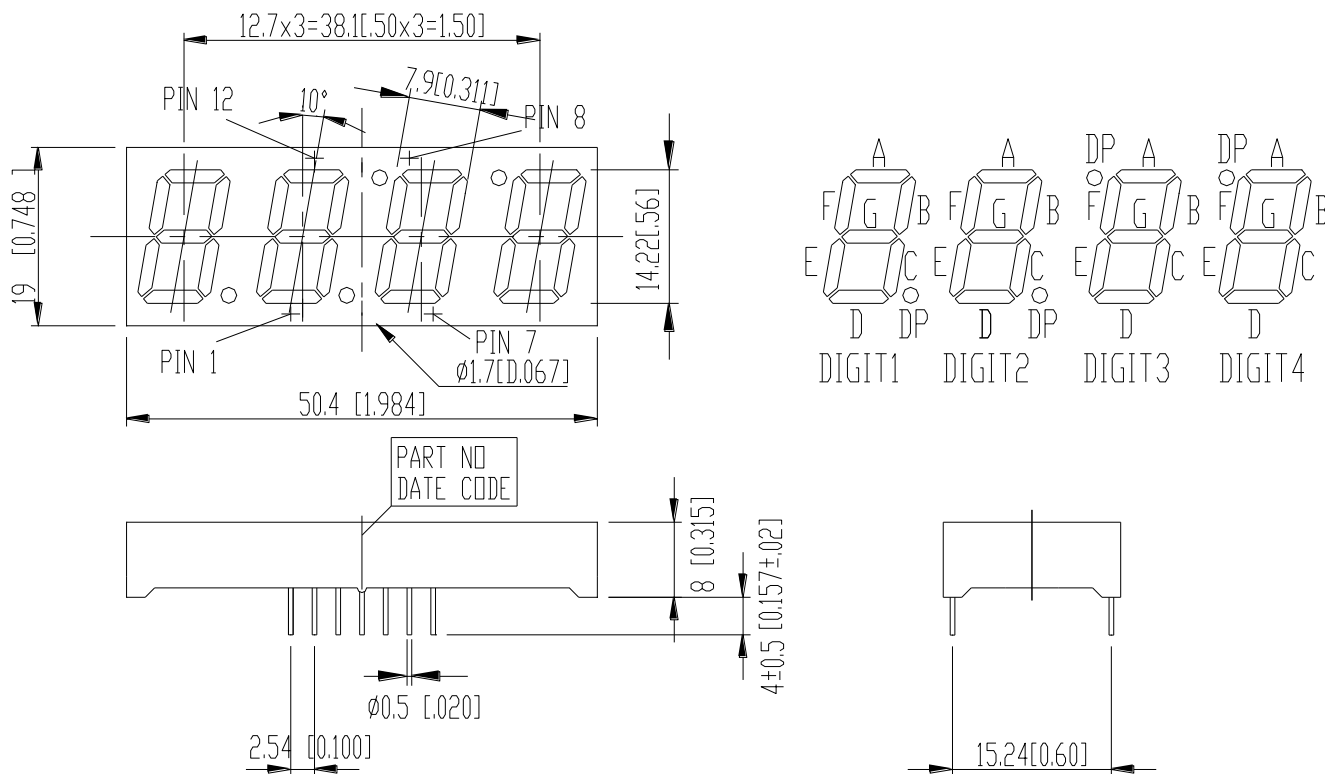
DESCRIPTION

The LTC-5653HR is a 0.56-inch (14.22-mm) height quadruple digit seven-segment display. This device utilizes high efficiency red LED chips, which are made from GaAsP on a transparent GaP substrate, and has a red face and red segments.

DEVICE

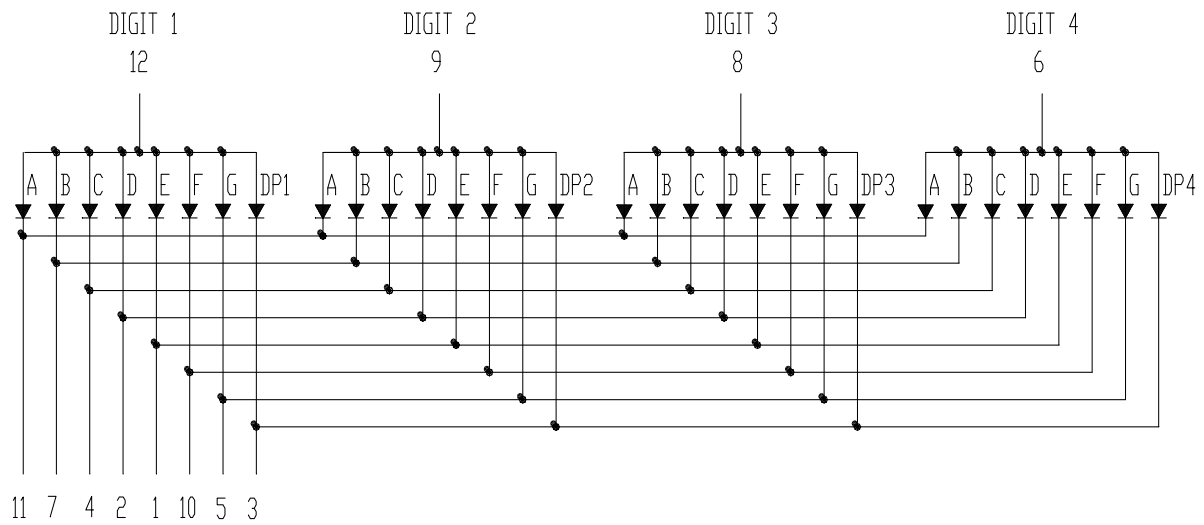
PART NO.	DESCRIPTION
HI. – EFF. RED	Multiplex Common Anode
LTC-5653HR	

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



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)

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	0.28	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Solder Temperature: max 260°C for max 3sec at 1.6mm[1/16inch] below seating plane. or temperature of unit (during assembly) not over max. temperature rating above .		

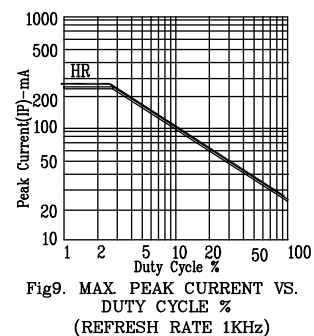
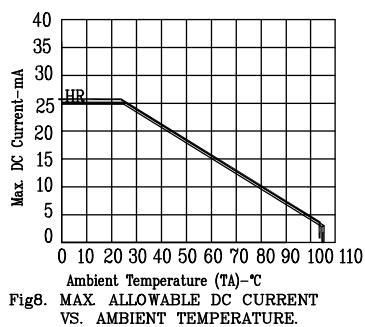
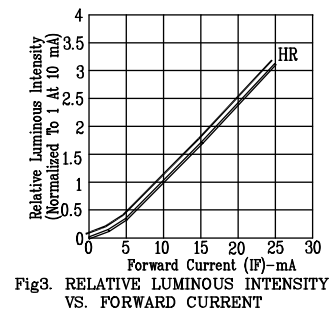
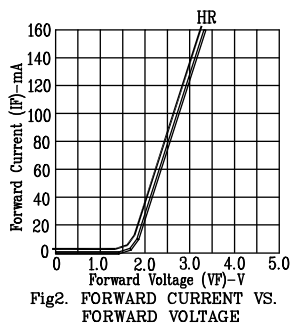
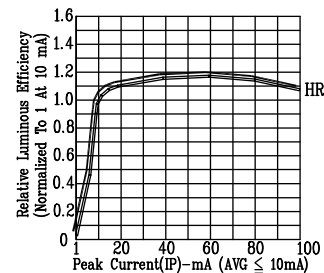
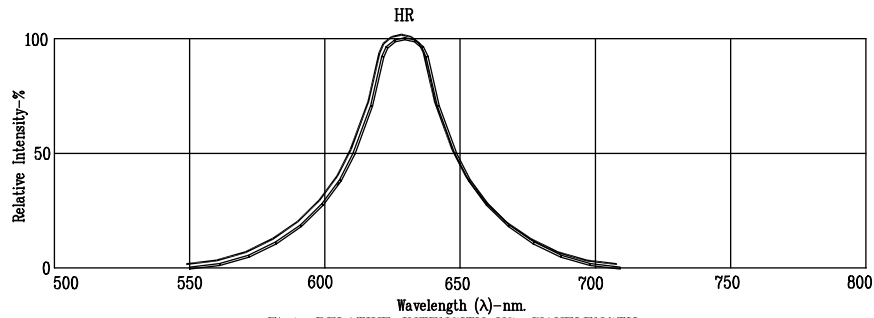
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _V	800	2400		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		621		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 (Commission Internationale De L'Eclairage) eye-response curve.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: HR=HL - EFF.RED