



LED Display Product Data Sheet LTS-6995HR

Spec No.: DS-30-98-264

Effective Date: 05/24/2000

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

FEATURES

- * 0.56-INCH (14.22-mm) DIGIT HEIGHT.
- * LOW POWER REQUIREMENT.
- * EXCELLENT CHARACTERS APPEARANCE.
- * CATEGORIZED FOR LUMINOUS INTENSITY.
- * I.C. COMPATIBLE.
- * EASY MOUNTING ON P.C. BOARD OR SOCKET.

DESCRIPTION

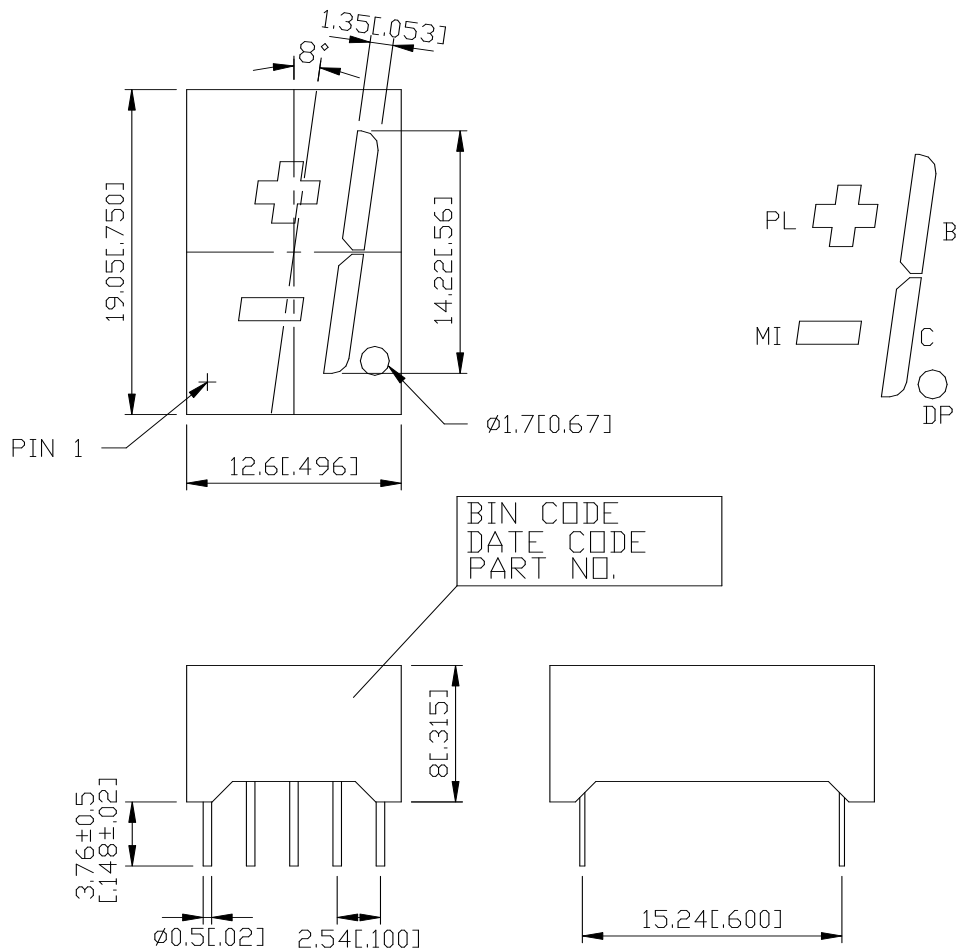
The LTS-6995HR is a 0.56-inch (14.22-mm) height single digit seven-segment display. This device utilizes high efficiency red LED chips, which are made from GaAsP on a transparent GaP substrate, and has a red face and red segments.

DEVICE

PART NO.	DESCRIPTION
HI. – EFF. RED	Common Cathode
LTS-6995HR	±1 Overflow

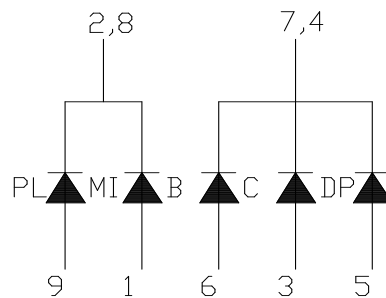
Property of Lite-On Only

PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are $\pm 0.25\text{mm}(0.01\text{'})$ unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



Property of Lite-On Only

PIN CONNECTION

No	CONNECTION
1	ANODE MI
2	CATHODE PL.,MI *1
3	ANODE C
4	CATHODE B , C , DP *2
5	ANODE DP
6	ANODE B
7	CATHODE B , C , DP *2
8	CATHODE PL.,MI *1
9	ANODE PL
10	NO CONNECTION

NOTE: *1 Pin 2 & 8 are internally connected.

*2 Pin 4 & 7 are internally connected.

ABSOLUTE MAXIMUM RATING AT T_A=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 1/16 inch Below Seating Plane for 3 Seconds at 260°C		

ELECTRICAL / OPTICAL CHARACTERISTICS AT T_A=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		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 (Commission Internationale De L'Eclairage) eye-response curve.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

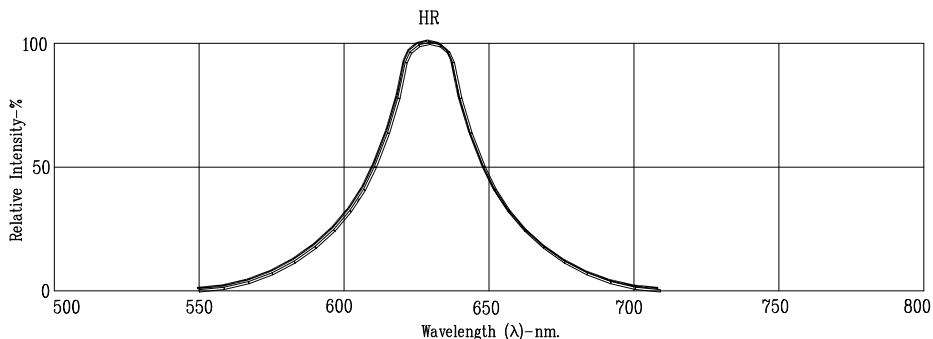


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

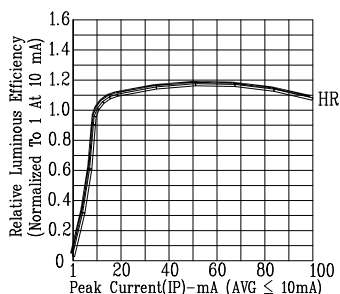


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

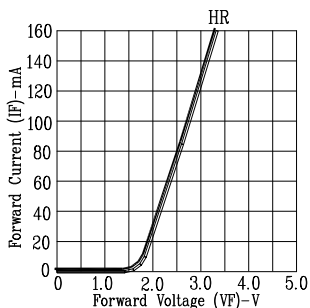


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

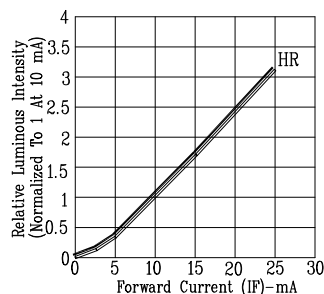


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

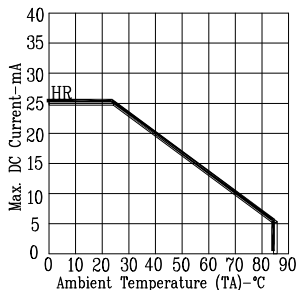


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

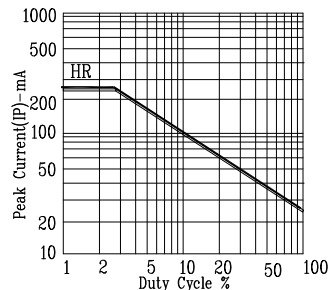


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: HR=HI - EFF. RED