

**FEATURES**

- \*0.3 INCH ( 7.6 mm ) DIGIT HEIGHT.
- \*CONTINUOUS UNIFORM SEGMENTS.
- \*LOW POWER REQUIREMENT.
- \*EXCELLENT CHARACTERS APPEARANCE.
- \*HIGH BRIGHTNESS & HIGH CONTRAST.
- \*WIDE VIEWING ANGLE.
- \*SOLID STATE RELIABILITY.

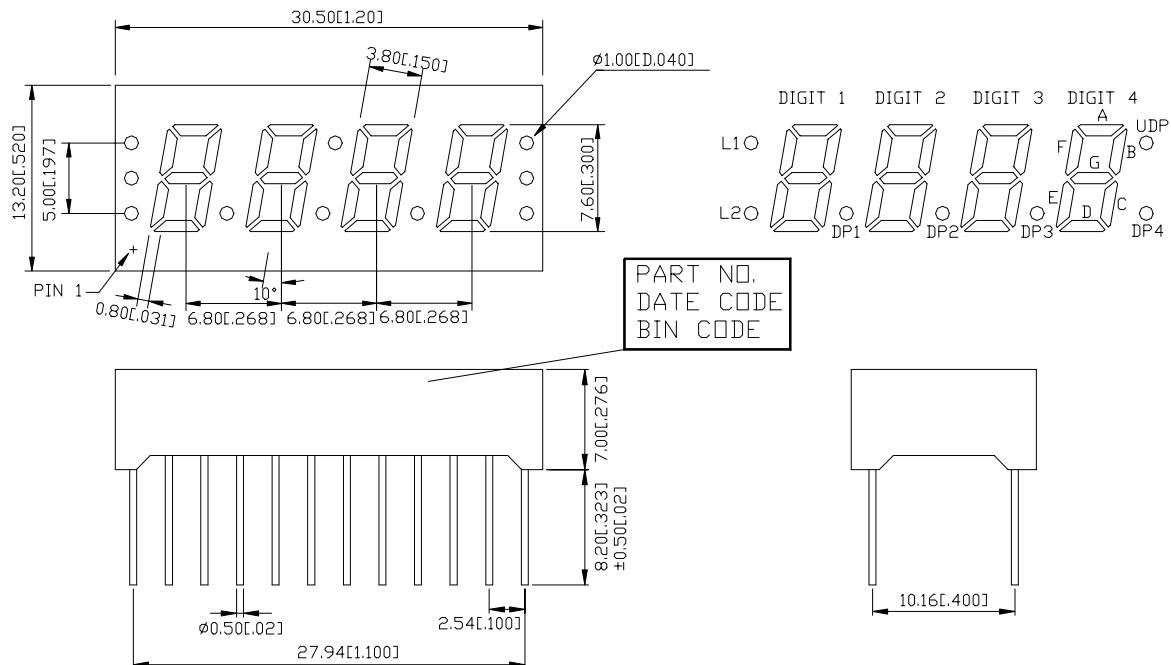
**DESCRIPTION**

The LTC-3711HR is a 0.3 inch (7.6 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**

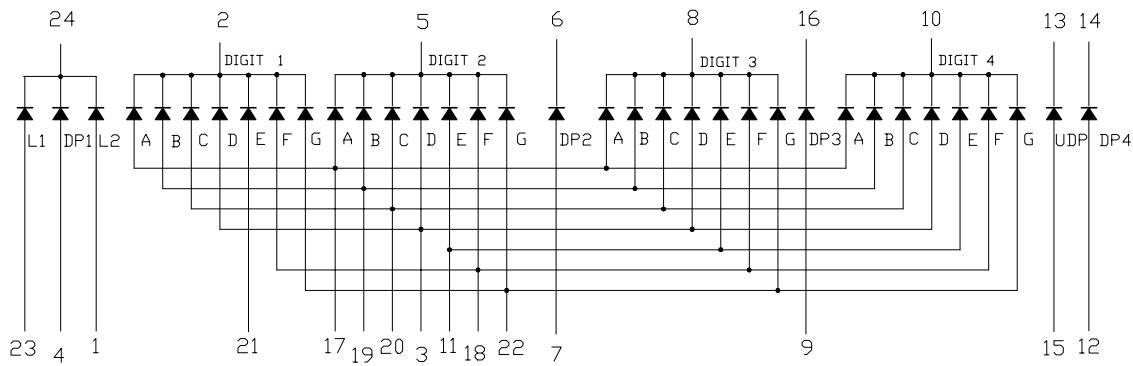
PART NO.	DESCRIPTION
Hi-Eff. Red	Multiplex Common Cathode
LTC-3711HR	Rt. Hand Decimal

## PACKAGE DIMENSIONS



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

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

NO	CONNECTION	NO	CONNECTION
1	ANODE L2	13	CATHODE U.D.P
2	COMMON CATHODE DIGIT 1	14	CATHODE D.P.4
3	ANODE D	15	ANODE U.D.P
4	ANODE D. P. 1	16	CATHODE D.P.3
5	COMMON CATHODE DIGIT 2	17	ANODE A
6	CATHODE D.P.2	18	ANODE F
7	ANODE D.P.2	19	ANODE B
8	COMMON CATHODE DIGIT 3	20	ANODE C
9	ANODE D. P. 3	21	ANODE E DIGIT 1
10	COMMON CATHODE DIGIT 4	22	ANODE G
11	ANODE E DIGIT 2, 3, 4	23	ANODE L1
12	ANODE D.P.4	24	COMMON CATHODE L1, DP1, L2

PART NO.: LTC-3711HR

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BNS-OD-C131/A4

**ABSOLUTE MAXIMUM RATING AT T<sub>A</sub>=25°C**

<b>PARAMETER</b>	<b>MAXIMUM RATING</b>	<b>UNIT</b>
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<sub>A</sub>=25°C**

<b>PARAMETER</b>	<b>SYMBOL</b>	<b>MIN.</b>	<b>TYP.</b>	<b>MAX.</b>	<b>UNIT</b>	<b>TEST CONDITION</b>
Average Luminous Intensity	I <sub>v</sub>	800	2000		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		635		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		40		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		623		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	V <sub>F</sub>		2.0	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio	I <sub>v-m</sub>			2:1		I <sub>F</sub> =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 CHARACTERISTICS CURVES ( 25°C Ambient Temperature Unless Otherwise Note)**

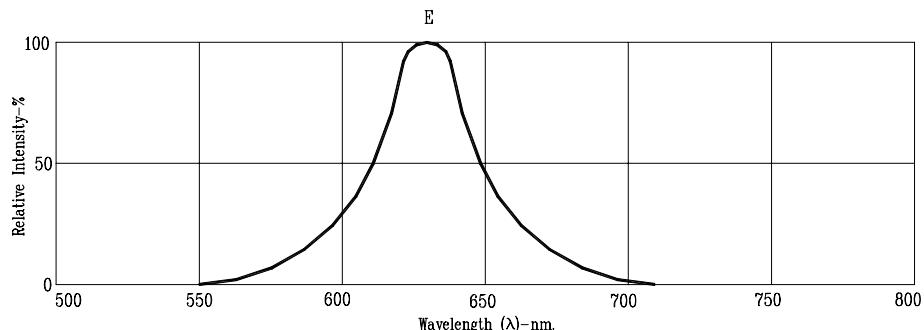


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

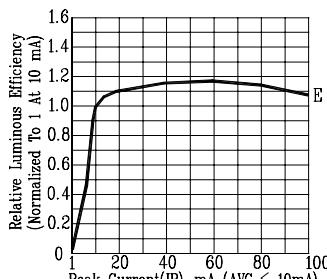


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

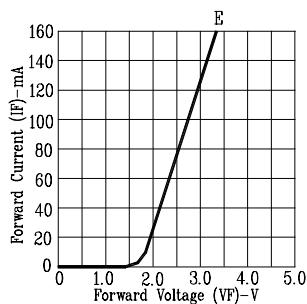


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

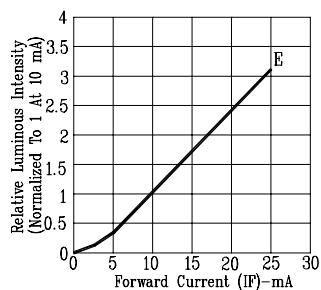


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

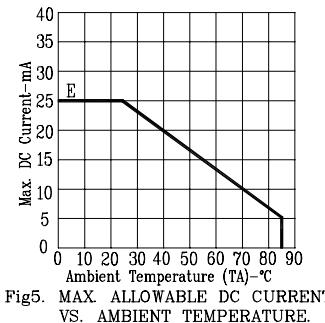


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE

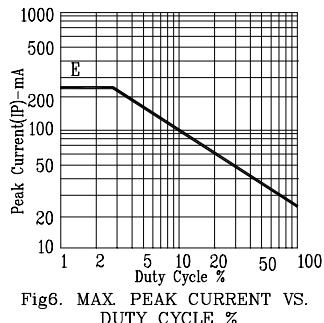


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: E=RED ORANGE