



**Spec No.: DS-30-96-124**Effective Date: 03/29/2011

Revision: A

**LITE-ON DCC** 

**RELEASE** 

BNS-OD-FC001/A4

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**LED DISPLAY** 

# **LTC-5723HR DATA SHEET**

ITEM	DESCRIPTION	ISSUER	DATE
1	New Spec.	Ruby Lee	4/03/2000

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### **FEATURES**

- \*0.56 inch (14.2 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-5723HR is a 0.56 inch (14.2 mm) digit 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-5723HR	Rt. Hand Decimal			

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### **PACKAGE DIMENSIONS** 8.1[0.319] 1.35[0.053] DIGIT 1 DIGIT 2 DIGIT 3 DIGIT 4 6.25[0.3 14.2[0.559] 19[0.748] D DP 1 DP 2 DP 3 DP 4 ø1.7[ø0.067] PIN 1 12.7X3=38.1[1.5] 4.7[0.185] 50.3[1.98] 7.8±0.5[0.307±0.02] 8[0.315] PART NO. DATE CODE BIN CODE Ø0.5[Ø0.02] 2.54X5=12.7[0.5]15.24[0.6] NOTES: All dimensions are in millimeters. Tolerances are ± 0.25 mm (0.01") unless otherwise noted. INTERNAL CIRCUIT DIAGRAM DIGIT 3 DIGIT 4 DIGIT 1 DIGIT 2 12 9 8 6 D F G DP В С D Е F G DP В C D E F G DP В С D Е F G 11 7 4 2 1 10 5 PAGE: PART NO.: LTC-5723HR 3 of 6

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## PIN CONNECTION

No.	CONNECTION					
1	ANODE E					
2	ANODE D					
3	ANODE D.P.					
4	ANODE C					
5	ANODE G					
6	COMMON CATHODE (DIGIT 4)					
7	ANODE B					
8	COMMON CATHODE (DIGIT 3)					
9	COMMON CATHODE (DIGIT 2)					
10	ANODE F					
11	ANODE A					
12	COMMON CATHODE (DIGIT 1)					

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### 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	$-35^{\circ}\text{C}$ to $+85^{\circ}\text{C}$			
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

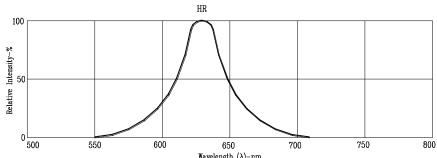
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	870	2400		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λр		635		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		40		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λd		623		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	$V_{\mathrm{F}}$		2.0	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	Ir			100	μΑ	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio	Iv-m			2:1		I=10mA

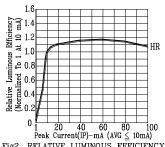
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

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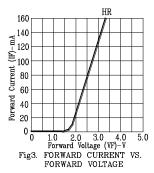
### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

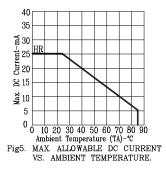
(25°C Ambient Temperature Unless Otherwise Noted)

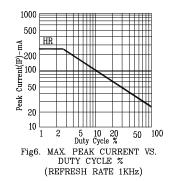




0 1 20 40 60 80 100
Peak Current(IP)-mA (AVG ≦ 10mA)
Fig2. RELATIVE LUMINOUS EFFICIENCY
(LUMINOUS INTENSITY PER UNIT
CURRENT) VS. PEAK CURRENT
(REFRESH RATE 1KHZ)







NOTE: HR=HI.-EFF.RED

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