



Spec No.: DS-30-98-052 Effective Date: 03/13/2002

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LITEON LITE-ON ELECTRONICS, INC.

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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 LTS-549AHR is a 0.52 inch (13.2 mm) digit 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.

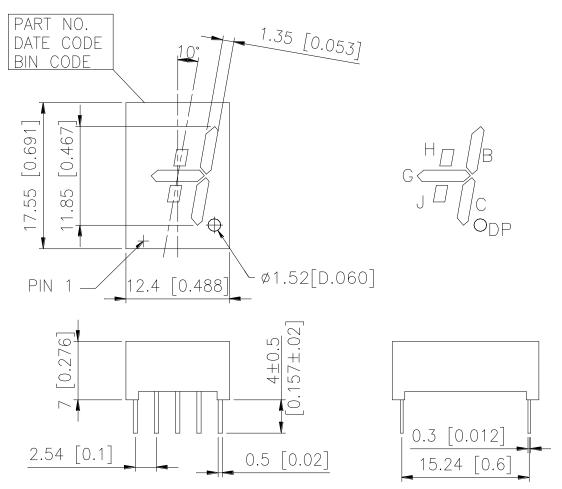
DEVICE

PART NO.	DESCRIPTION			
Hi-Eff. RED	Common Cathode			
LTS-549AHR	Rt. Hand Decimal			

PAGE: 1 of 5 PART NO.: LTS-549AHR

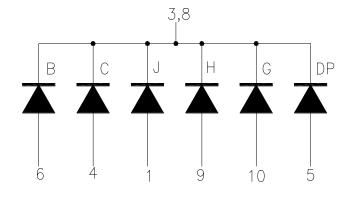
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PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PART NO.: LTS-549AHR PAGE: 2 of 5

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PIN CONNECTION

No.	CONNECTION
1	ANODE J
2	NO CONNECTION
3	COMMON CATHODE
4	ANODE C
5	ANODE D.P.
6	ANODE B
7	NO CONNECTION
8	COMMON CATHODE
9	ANODE H
10	ANODE G

PAGE: PART NO.: LTS-549AHR 3 of 5



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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°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

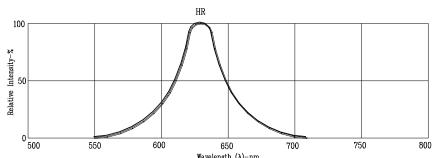
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	800	2200		μcd	I _F =10mA
Peak Emission Wavelength	λр		635		nm	I _F =20mA
Spectral Line Half-Width	Δλ		40		nm	I _F =20mA
Dominant Wavelength	λd		623		nm	I _F =20mA
Forward Voltage Per Segment	VF		2	2.6	V	I _F =20mA
Reverse Current Per Segment	Ir			100	μΑ	V _R =5V
Luminous Intensity Matching Ratio	Iv-m			2:1		I _F =10mA

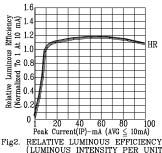
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

PART NO.: LTS-549AHR PAGE: 4 of 5

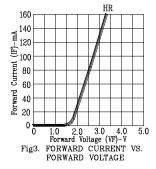
TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

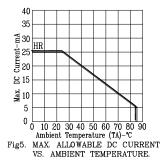
(25°C Ambient Temperature Unless Otherwise Noted)



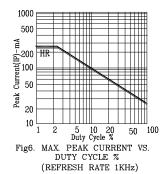


RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)





HR 0 5 10 15 20 25 30
Forward Current (IF)-mA
Fig4. RELATIVE LUMINOUS INTENSITY
VS. FORWARD CURRENT



NOTE: HR=HI.-EFF.RED

PAGE: PART NO.: LTS-549AHR 5 of 5