



# LED Display

## Product Data Sheet

### LTC-4724JD

Spec No.: DS30-2004-151

Effective Date: 07/13/2004

Revision: -

**LITE-ON DCC**

**RELEASE**

## FEATURES

- \* 0.4 inch (10.0 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**

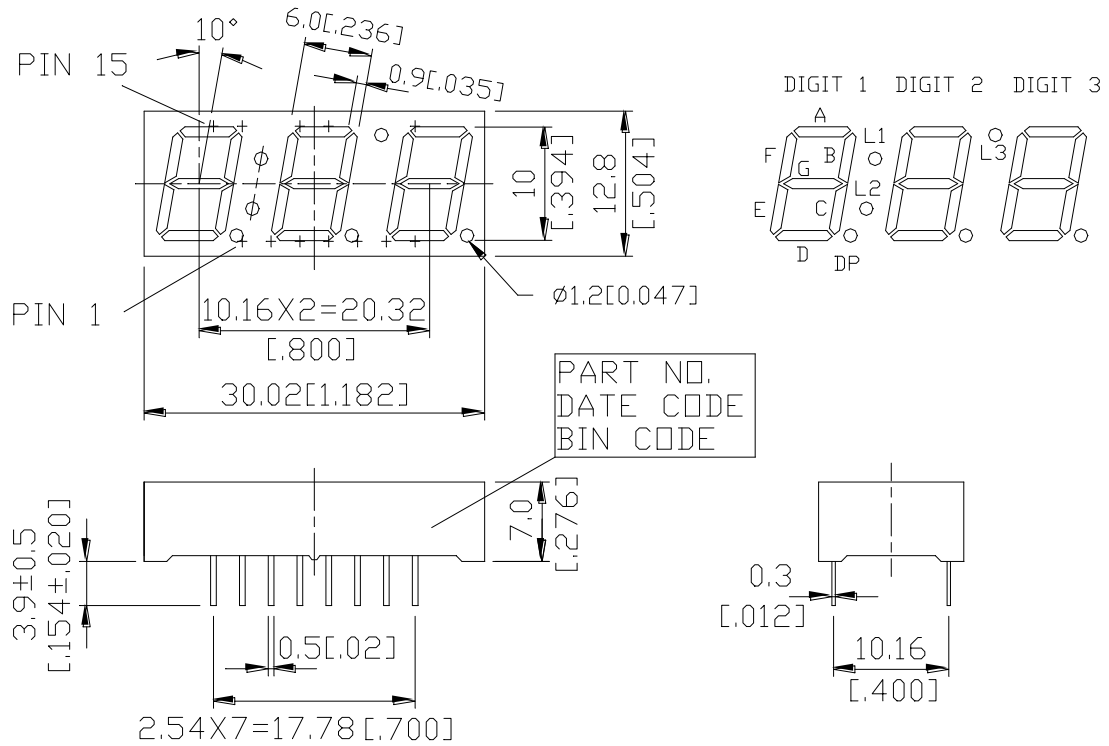
## DESCRIPTION

The LTC-4724JD is a 0.4 inch (10.0 mm) digit height triple digit seven-segment display. This device uses AS-AllnGaP Hyper red LED chips ( AllnGaP epi on GaAs substrate). The display has a gray face and white segments.

## DEVICE

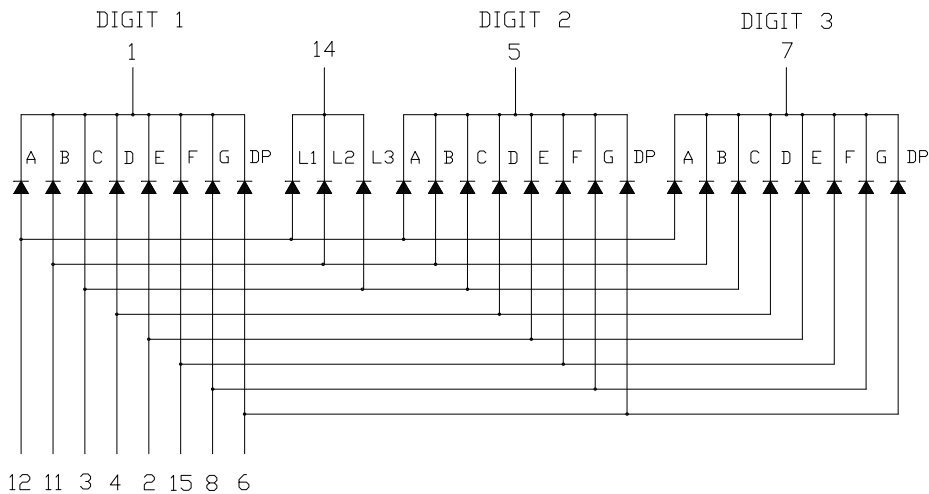
PART NO.	DESCRIPTION
AllnGaP Hyper Red	Multiplex Common Cathode Rt. Hand Decimal
LTC-4724JD	

### PACKAGE DIMENSIONS



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

### INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

NO	CONNECTION
1	COMMON CATHODE DIGIT 1
2	ANODE E
3	ANODE C,L3
4	ANODE D
5	COMMON CATHODE DIGIT 2
6	ANODE DP
7	COMMON CATHODE DIGIT 3
8	ANODE G
9	NO PIN
10	NO PIN
11	ANODE B,L2
12	ANODE A,L1
13	NO PIN
14	COMMON CATHODE L1,L2,L3
15	ANODE F

**ABSOLUTE MAXIMUM RATING**

<b>PARAMETER</b>	<b>MAXIMUM RATING</b>	<b>UNIT</b>
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	90	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25 <sup>0</sup> C Per Segment	0.33	mA/ <sup>0</sup> C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35 <sup>0</sup> C to +85 <sup>0</sup> C	
Storage Temperature Range	-35 <sup>0</sup> C to +85 <sup>0</sup> C	
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260 <sup>0</sup> C		

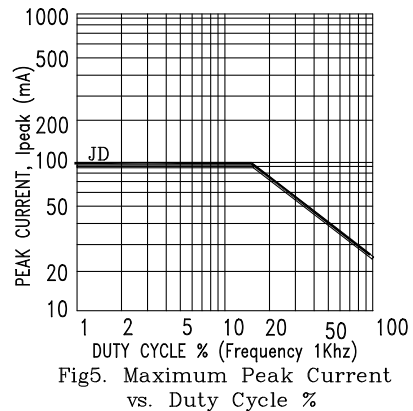
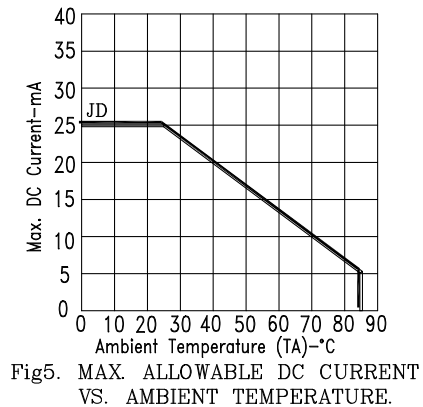
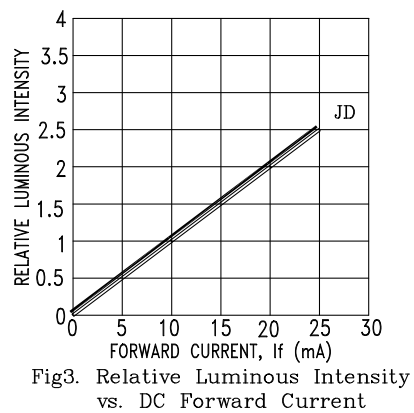
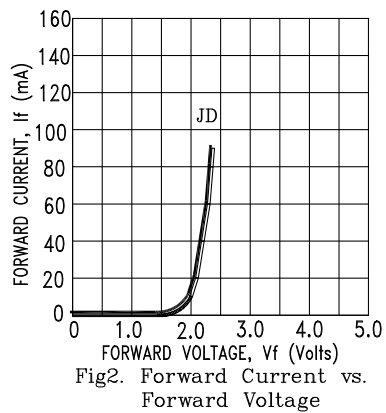
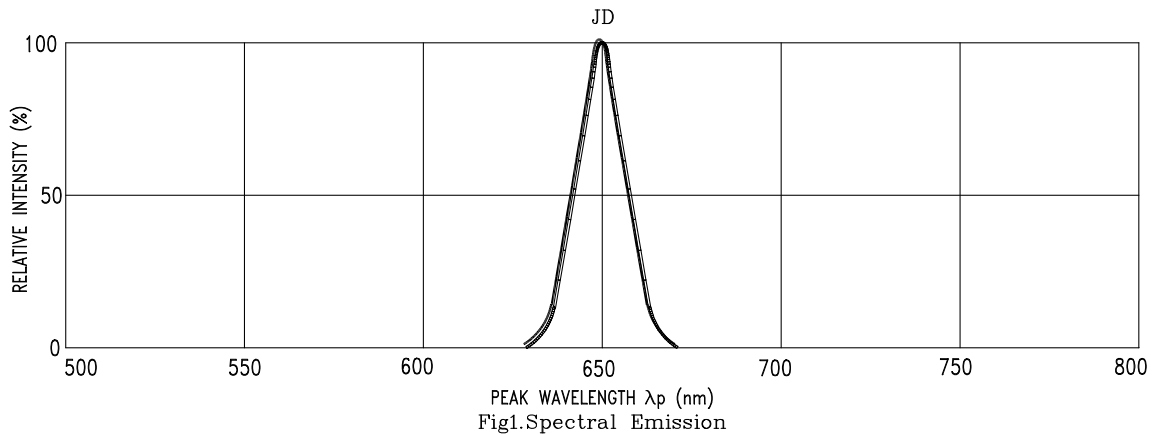
**ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25<sup>0</sup>C**

<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>	200	650		μcd	I <sub>F</sub> =1mA
Peak Emission Wavelength	λ <sub>p</sub>		639		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		20		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		631		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</sub> -m			2:1		I <sub>F</sub> =1mA

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 CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE : JD=AlInGaP HYPER RED