



# **LED Display**

## **Product Data Sheet**

### **LTC-4624P**

Spec No.: DS-30-95-233

Effective Date: 01/15/2010

Revision: B

**LITE-ON DCC**

**RELEASE**

**BNS-OD-FC001/A4**

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## **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 (ACCORDING TO ROHS)**

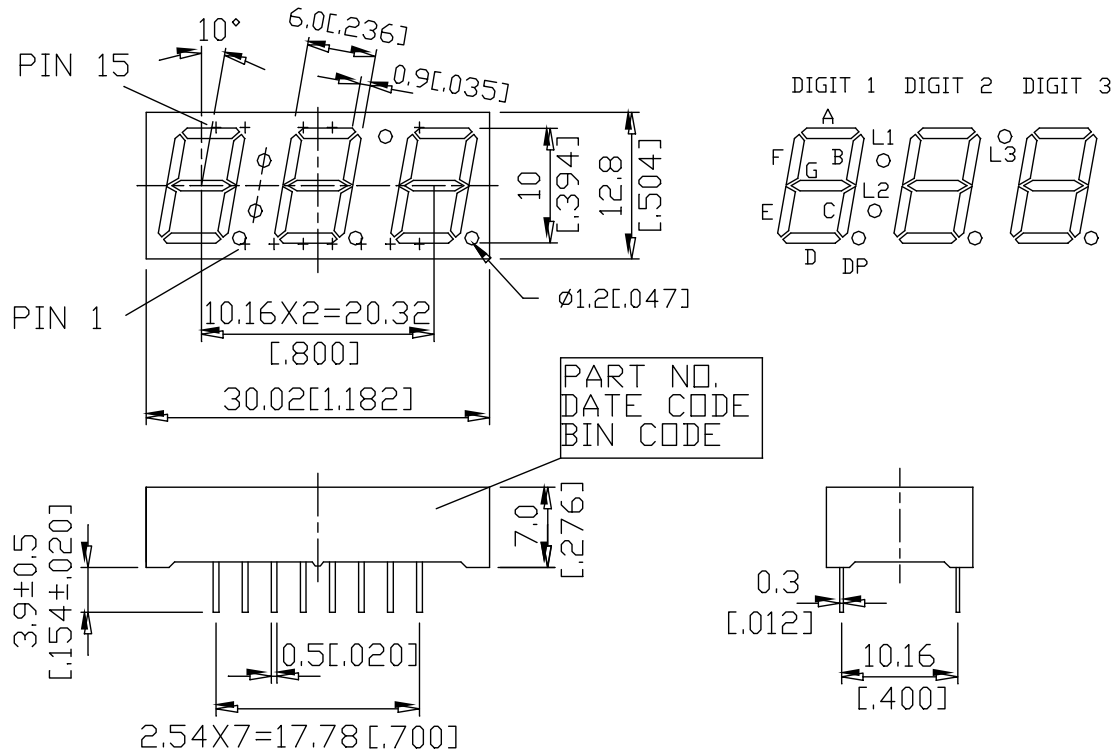
## **DESCRIPTION**

The LTC-4624P is a 0.4 inch (10.0 mm) digit height triple digit seven-segment display. This device uses BRIGHT RED LED chips (GaP epi on GaP substrate). The display has gray face and white segments.

## **DEVICE**

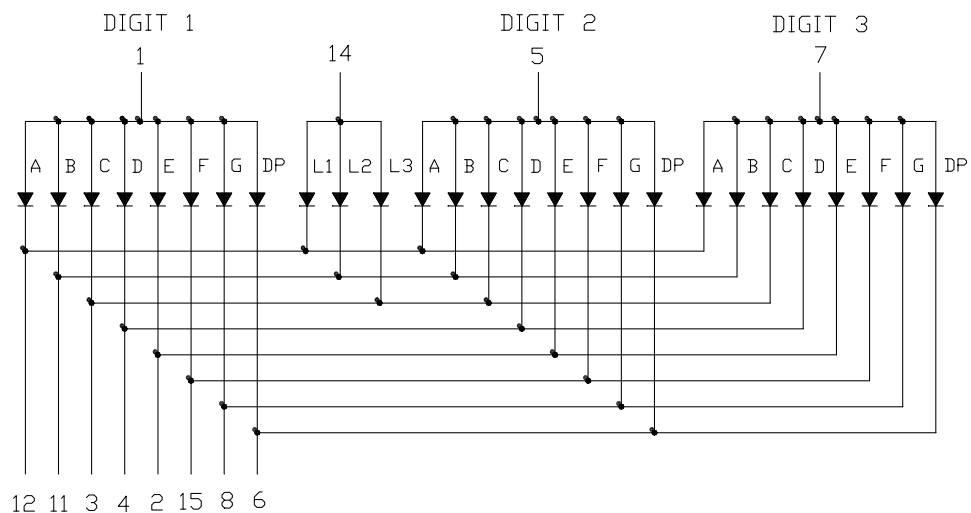
PART NO.	DESCRIPTION
BRIGHT RED	Multiplex Common Anode Rt. Hand Decimal
LTC-4624P	

## PACKAGE DIMENSIONS



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

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

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

**ABSOLUTE MAXIMUM RATING**

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	40	mW
Peak Forward Current Per Segment ( Frequency 1Khz, 10% duty cycle)	60*	mA
Continuous Forward Current Per Segment	15	mA
Forward Current Derating from 25 <sup>0</sup> C	0.2	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°C	
Soldering Conditions : 1/16 inch below seating plane for 3 seconds at 260 <sup>0</sup> C.		

\* see figure 5 to establish pulsed condition

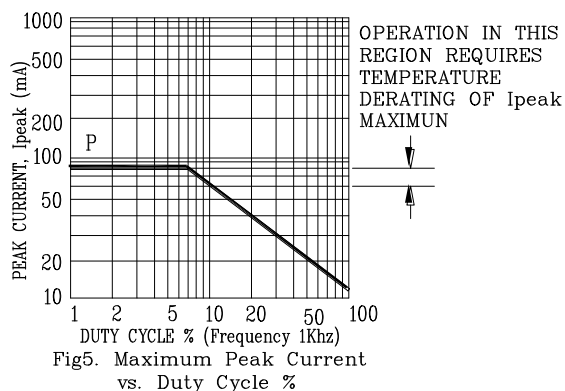
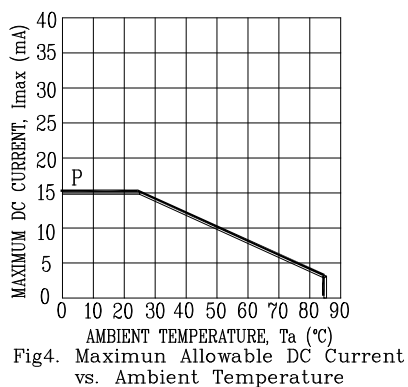
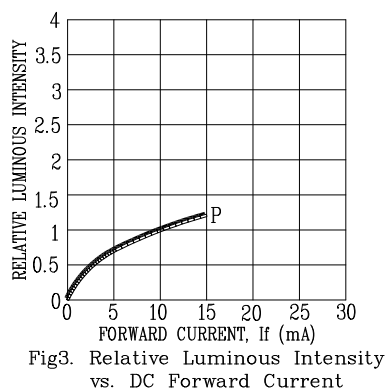
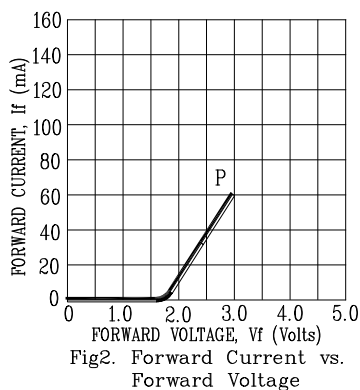
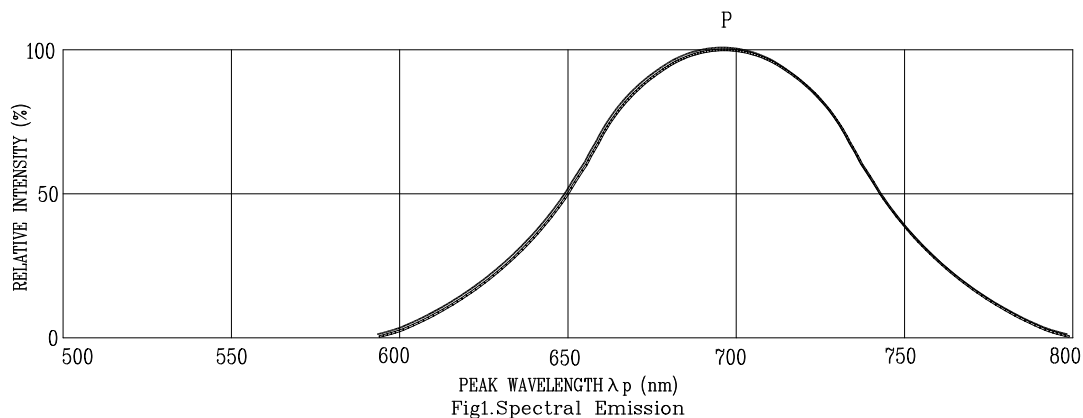
**ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25<sup>0</sup>C**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	320	800		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		697		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		90		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		657		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	V <sub>F</sub>		2.1	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 (Similar Light Area)	I <sub>v</sub> -m			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 CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE : P=BRIGHT RED