

## LITEON LITE-ON TECHNOLOGY CORPORATION

**Property of Lite-On Only** 

### **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-08 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**

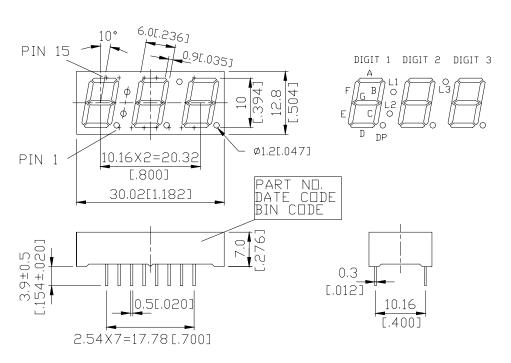
PART NO.	DESCRIPTION
BRIGHT RED	Multiplex Common Anode
LTC-4624P-08	Rt. Hand Decimal

PART NO.: LTC-4624P-08 PAGE: 1 of 5

### LITE-ON TECHNOLOGY CORPORATION

**Property of Lite-On Only** 

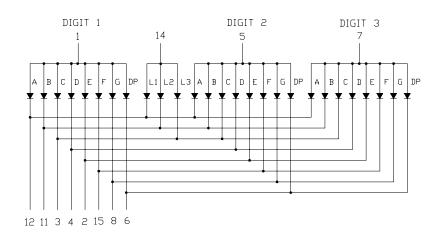
### **PACKAGE DIMENSIONS**



- Add protective film in display.
- Protective film specification
  - 1. Dimensions: 13x 30mm
  - 2. Material: PE
  - 3. Temp. Range: -5~50 degree C.

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

### INTERNAL CIRCUIT DIAGRAM



PART NO.: LTC-4624P-08 PAGE: 2 of 5



# **LITEON** LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

### 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	

PAGE: PART NO.: LTC-4624P-08 3 of 5



# **LITEON** LITE-ON TECHNOLOGY CORPORATION

**Property of Lite-On Only** 

### 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>o</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°C			

<sup>\*</sup> see figure 5 to establish pulsed condition

### ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	Iv	320	800		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λр		697		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		90		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λd		657		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	$V_{\mathrm{F}}$		2.1	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	Ir			100	μΑ	$V_R=5V$
Luminous Intensity Matching Ratio (Similar Light Area)	Iv-m			2:1		I <sub>F</sub> =10mA

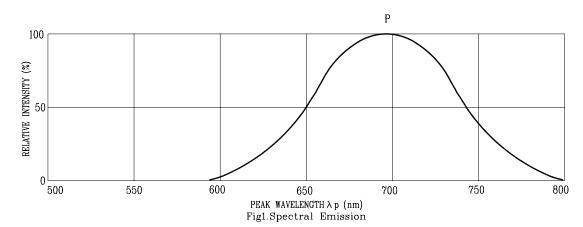
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

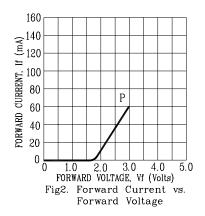
PART NO.: LTC-4624P-08 PAGE: 4 of 5
-------------------------------------

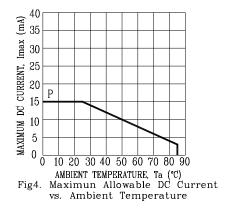
Property of Lite-On Only

### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)







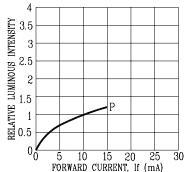
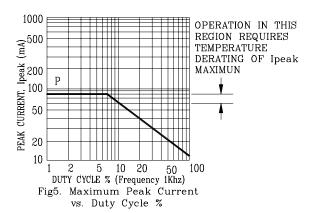


Fig3. Relative Luminous Intensity vs. DC Forward Current



NOTE: P=BRIGHT RED

PART NO.: LTC-4624P-08 PAGE: 5 of 5