

**LED DISPLAY****LTC-5630E-01J**  
**DATASHEET**

<u>Rev</u>	<u>Description</u>	<u>By</u>
01	ORIGINAL (Refer to contour drawing Revision (-))	<u>WARIN S</u> Mar 11. 09
02	Change pin length from 10.5mm to 13.00 mm on page 2 of 5	<u>KITTISAK</u> Mar 26/2009
03	Change pin length from 13.00mm±0.5mm to 20.5mm±0.5mm on page 2 of 5	<u>KITTISAK</u> Apr 03/2009
04	Change pin length from 20.50mm±0.5mm to 22.5mm±0.5mm on page 2 of 5	<u>KITTISAK</u> May 19/2009
(Above data for PD and Customer tracking only)		
-	NPPR Received and Upload on OPNC	<u>KITTISAK B.</u> May 26/2009

SPEC. NO.: DS30-2009-0060DATE : May 26/2009REV. NO. : -PAGE NO. : 0 OF 5

## **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.
- \* **LEAD-FREE PACKAGE**(ACCORDING TO ROHS)

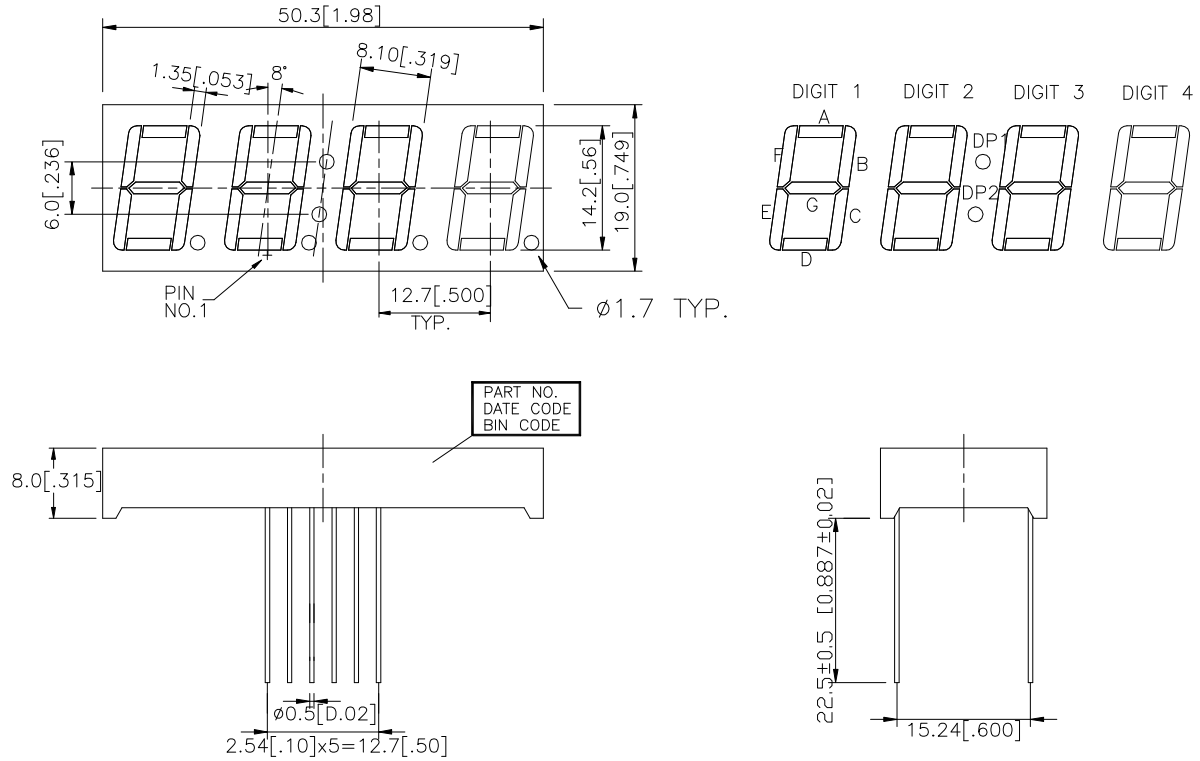
## **DESCRIPTION**

The LTC-5630E-01J is a 0.56 inch (14.2 mm) digit height quadruple digit seven-segment display. This device utilizes red orange LED chips, which are made from GaAsP on a transparent GaP substrate, and has a gray face and white segments.

## **DEVICE**

<b>PART NO.</b>	<b>DESCRIPTION</b>
Red Orange	Multiplex Common Anode
LTC-5630E-01J	

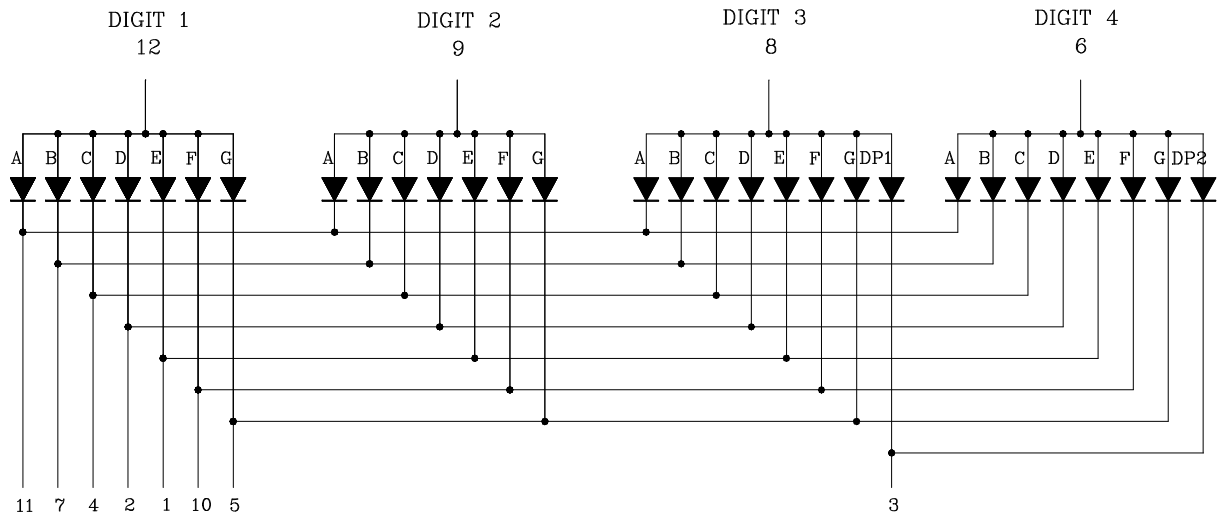
## PACKAGE DIMENSIONS



- NOTES: 1. All dimensions are in millimeters. Tolerances are  $\pm 0.25$  mm unless otherwise note.  
 2. Pin tip's shift tolerance is  $\pm 0.4$  mm.  
 3. Foreign material on segment  $\cong 10$  mils  
 4. Ink contamination (surface)  $\cong 20$  mils  
 5. Bending  $\cong 1/100$  of reflector length  
 6. Bubble in segment  $\cong 10$  mils

Property of Lite-On Only

## INTERNAL CIRCUIT DIAGRAM



## PIN CONNECTION

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

**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	0.28	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Solder Temperature: max 260°C for max 3sec at 1.6mm below seating plane. or of temperature unit (during assembly) not over max. temperature rating above.		

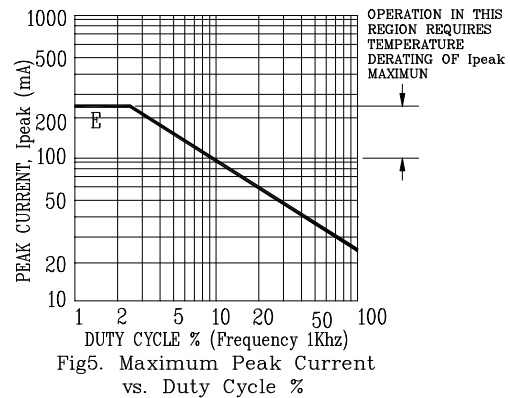
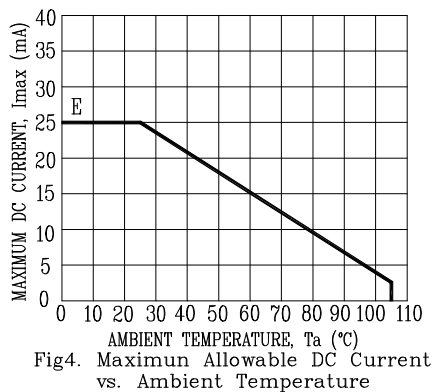
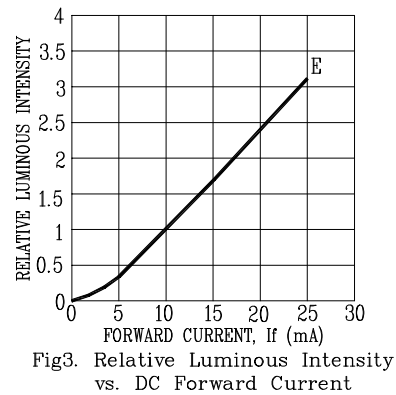
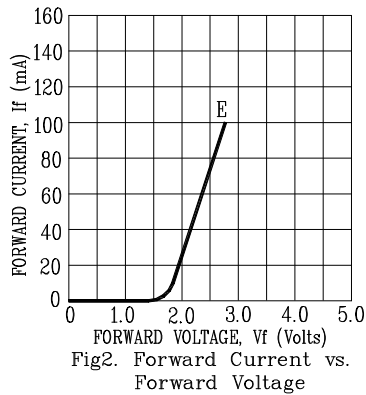
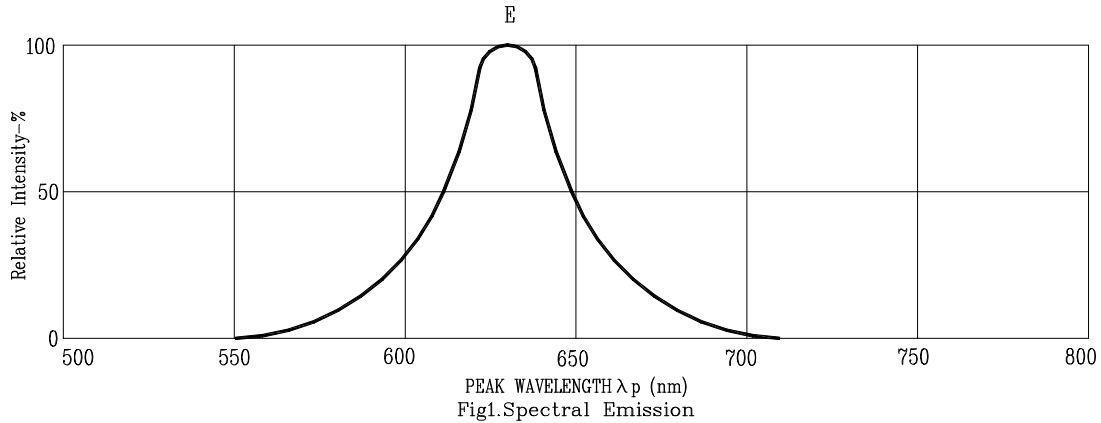
**ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	800	2400		μcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		630		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		40		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		621		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> =10mA

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

### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: E=RED ORANGE