

**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
- \* **LEAD-FREE PACKAGE**

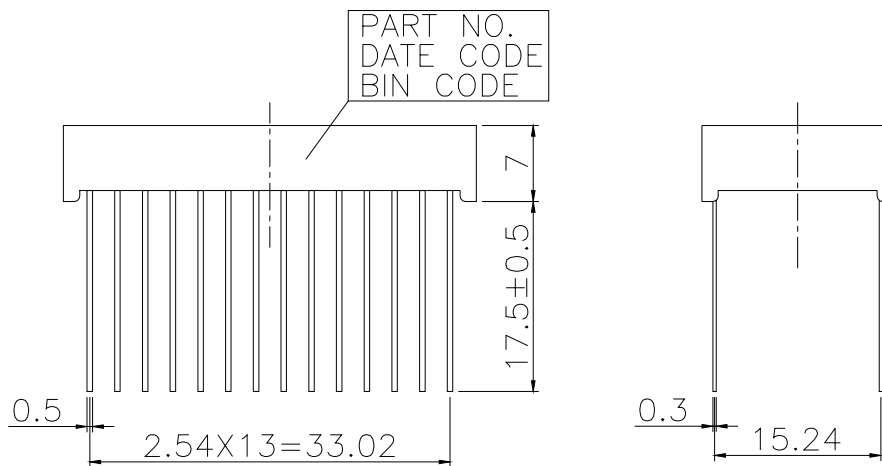
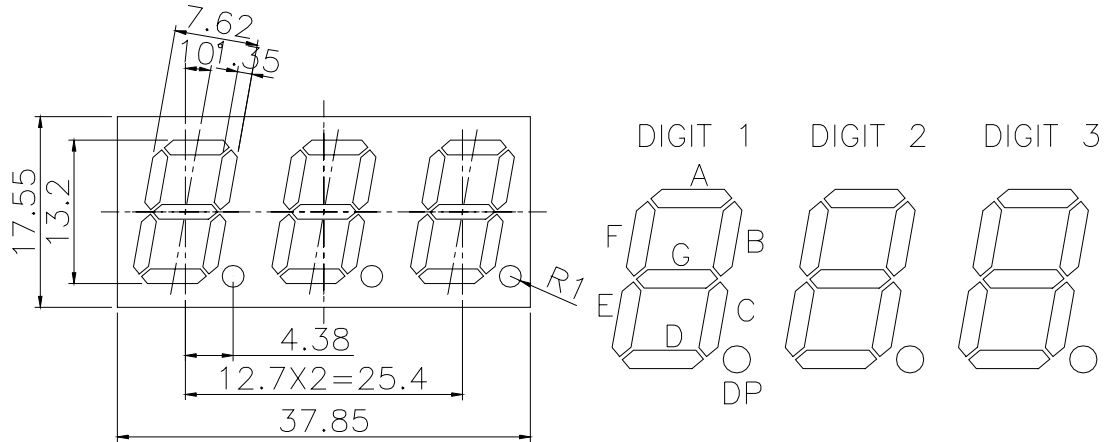
**DESCRIPTION**

The LTC-5836E-09J is a 0.52 inch (13.2 mm) digit height triple digit seven-segment display. This device uses RED ORANGE LED chips (GaAsP epi on GaP substrate). The display has a gray face and white segments.

**DEVICE**

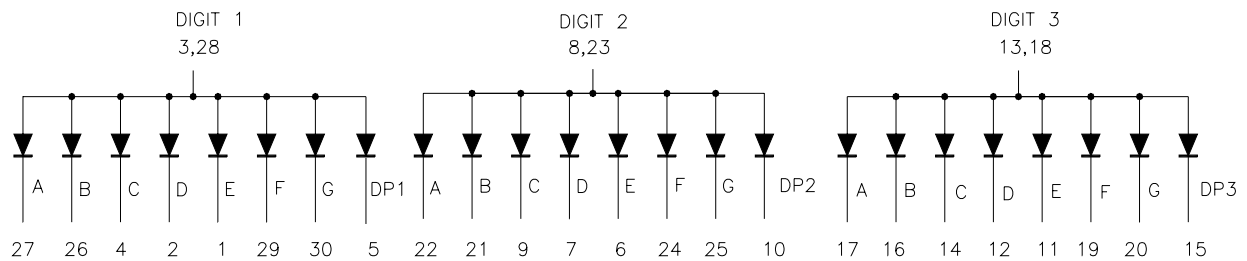
<b>PART NO.</b>	<b>DESCRIPTION</b>
RED ORANGE	Common Anode
LTC-5836E-09J	Rt. Hand Decimal

## PACKAGE DIMENSIONS



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

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

<b>NO.</b>	<b>CONNECTION</b>	<b>NO.</b>	<b>CONNECTION</b>
1	CATHODE E (DIGIT 1)	16	CATHODE B (DIGIT 3)
2	CATHODE D (DIGIT 1)	17	CATHODE A (DIGIT 3)
3	COMMON ANODE (DIGIT 1)	18	COMMON ANODE (DIGIT 3)
4	CATHODE C (DIGIT 1)	19	CATHODE F (DIGIT 3)
5	CATHODE D.P. (DIGIT 1)	20	CATHODE G (DIGIT 3)
6	CATHODE E (DIGIT 2)	21	CATHODE B (DIGIT 2)
7	CATHODE D (DIGIT 2)	22	CATHODE A (DIGIT 2)
8	COMMON ANODE (DIGIT 2)	23	COMMON ANODE (DIGIT 2)
9	CATHODE C (DIGIT 2)	24	CATHODE F (DIGIT 2)
10	CATHODE D.P. (DIGIT 2)	25	CATHODE G (DIGIT 2)
11	CATHODE E (DIGIT 3)	26	CATHODE B (DIGIT 1)
12	CATHODE D (DIGIT 3)	27	CATHODE A (DIGIT 1)
13	COMMON ANODE (DIGIT 3)	28	COMMON ANODE (DIGIT 1)
14	CATHODE C (DIGIT 3)	29	CATHODE F (DIGIT 1)
15	CATHODE D.P. (DIGIT 3)	30	CATHODE G (DIGIT 1)

**ABSOLUTE MAXIMUM RATING**

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment ( Frequency 1Khz, 10% duty cycle)	100*	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25 Per Segment	0.28	mA/
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35 to +105	
Storage Temperature Range	-35 to +105	
Solder Temperature: max 260 for max 3sec at 1.6mm below seating plane.		

\* see figure 5 to establish pulsed condition

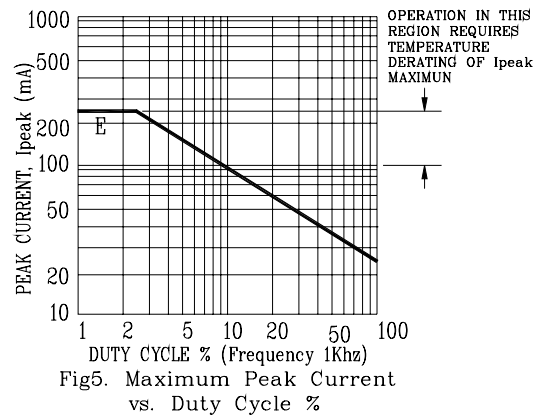
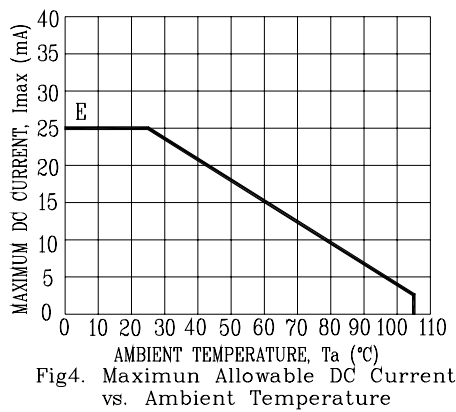
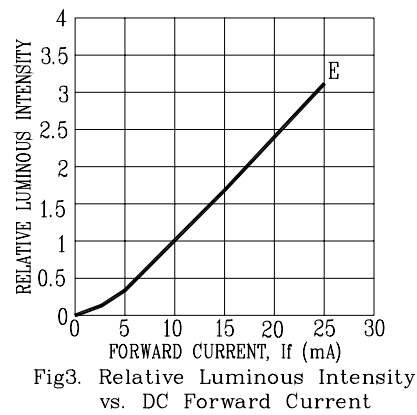
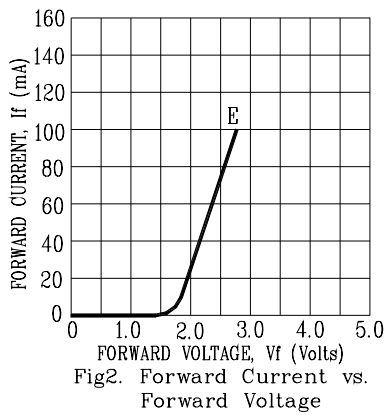
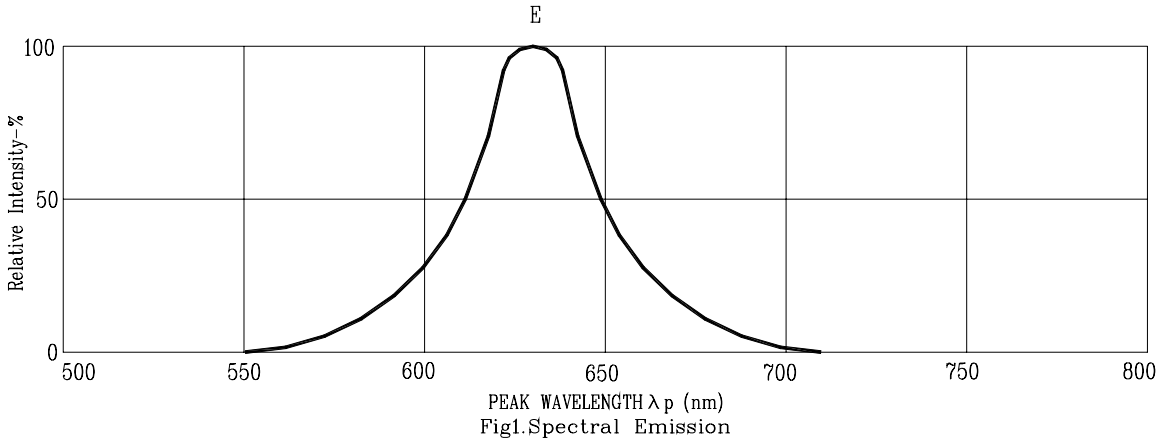
**ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	800	2200		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-m</sub>			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