

**FEATURE**

- \* 0.56 INCH (14.22mm ) DIGIT HEIGHT.
- \* LOW POWER REQUIREMENT.
- \* CONTINUOUS UNIFORM SEGMENTS.
- \* CATEGORIZED FOR LUMINOUS INTENSITY.
- \* WIDE VIEWING ANGLE.
- \* HIGH CONTRAST.
- \* HIGH BRIGHTNESS.
- \*SOLID STATE RELIABILITY
- \*EASY MOUNTING ON P.C. BOARD
- \* I.C. COMPATIBLE
- \* IR REFLOWABLE

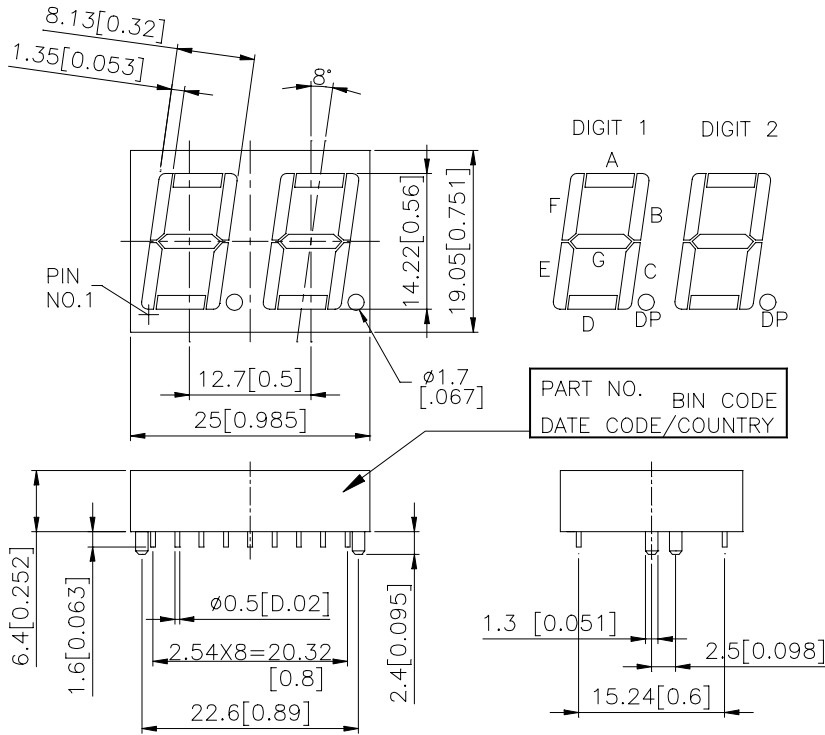
**DESCRIPTION**

The LTD-6910SH-R1 is a 0.56 inch ( 14.22mm) height dual digit display. This display utilizes high efficiency Red LED chips which are made from GaAsP on a transparent GaP substrate, and has light gray face and white segments. This device is IR reflowable.

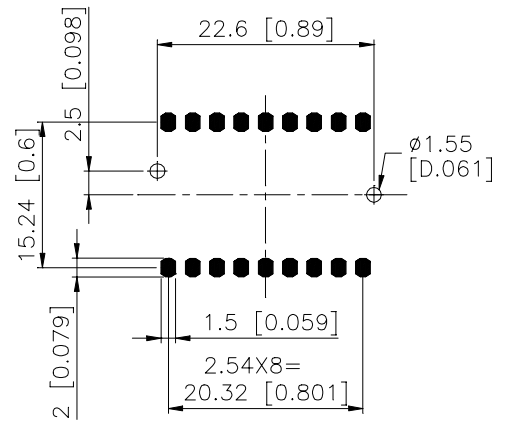
**DEVICE**

<b>PART NO.</b>	<b>DESCRIPTION</b>
HI-EFF. RED	Common Anode
LTD-6910SH-R1	Rt. Hand Decimal

### PACKAGE DIMENSION

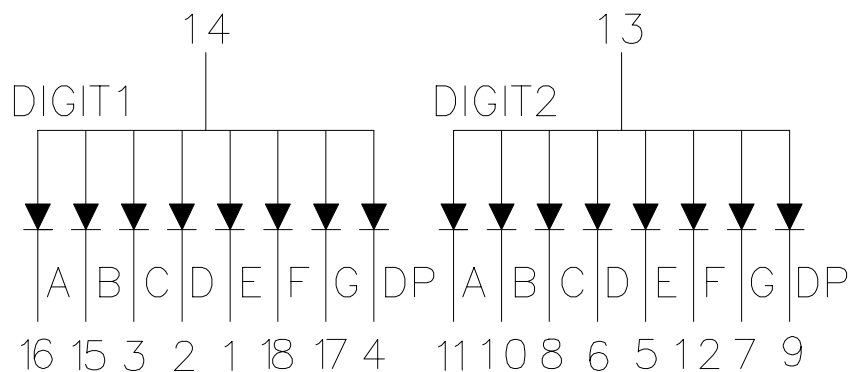


### PAD DIMENSIONS (SUGGESTION):



NOTES: All dimensions are in millimeters. Tolerance is  $\pm 0.25\text{-mm}$  (0.01") unless otherwise noted.

### INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

NO.	CONNECTION
1	CATHODE E (DIGIT 1)
2	CATHODE D (DIGIT 1)
3	CATHODE C (DIGIT 1)
4	CATHODE D.P. (DIGIT 1)
5	CATHODE E (DIGIT 2)
6	CATHODE D (DIGIT 2)
7	CATHODE G (DIGIT 2)
8	CATHODE C (DIGIT 2)
9	CATHODE D.P. (DIGIT 2)
10	CATHODE B (DIGIT 2)
11	CATHODE A (DIGIT 2)
12	CATHODE F (DIGIT 2)
13	COMMON ANODE (DIGIT 2)
14	COMMON ANODE (DIGIT 1)
15	CATHODE B (DIGIT 1)
16	CATHODE A (DIGIT 1)
17	CATHODE G (DIGIT 1)
18	CATHODE F (DIGIT 1)



# LITE-ON ELECTRONICS, INS.

Property of Lite-On Only

## 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	0.33	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°C	
IR Reflow conditions as Page 6 of 6		

## ELECTRICAL OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	800	2400		ucd	I <sub>f</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		650		nm	I <sub>f</sub> =20mA
Special Line Half-Width	Δλ		40		nm	I <sub>f</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		630		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	uA	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 CHARACTERISTICS CURVES ( 25°C Ambient Temperature Unless Otherwise Note)

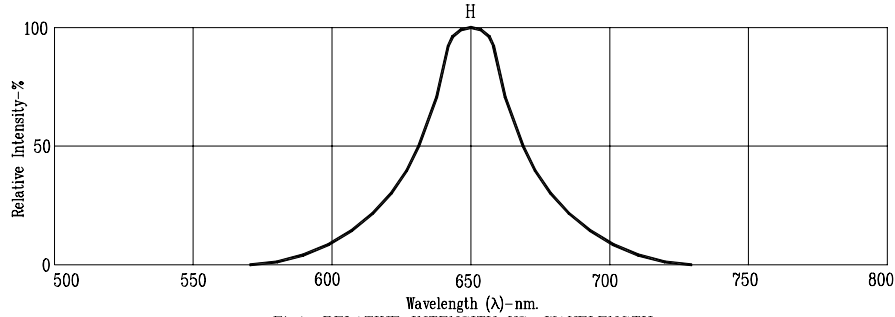


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

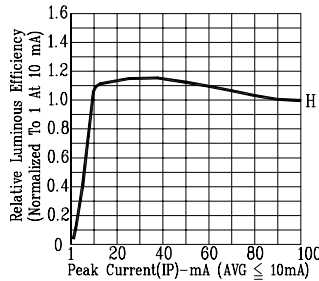


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

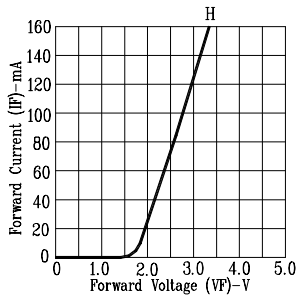


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

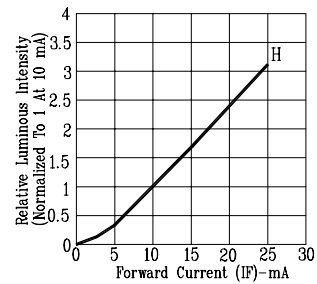


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

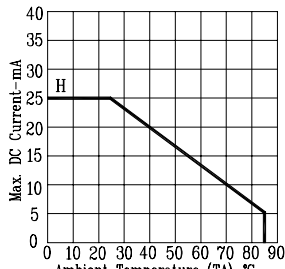


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

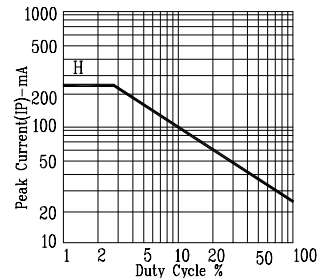


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: H=HI.EFF.-RED

**IR REFLOW MAXIMUM RATING TEMPERATURE**