LITEON®
OPTOELECTRONICS

LED Display

Product Data Sheet

LTS-3401LE-03

Spec No.: DS30-2005-023

Effective Date: 01/29/2005

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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FEATURES

* 0.8 inch (20.32 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)**

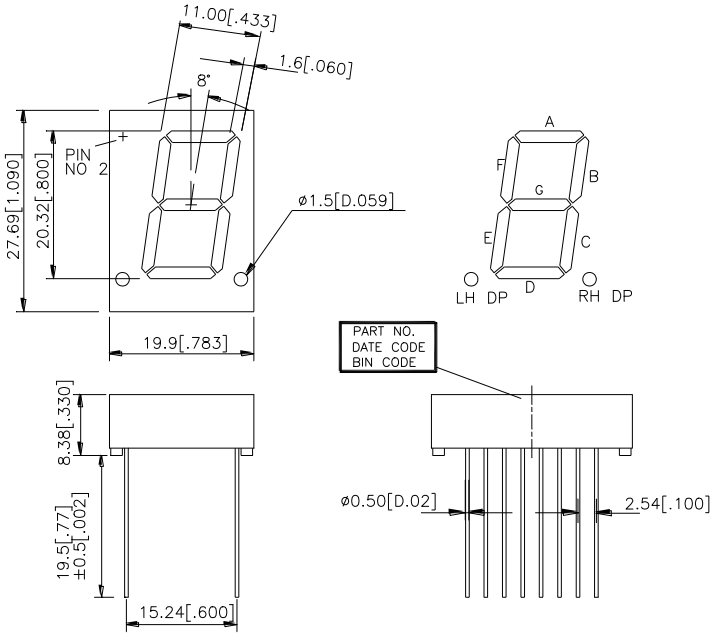
DESCRIPTION

The LTS-3401LE-03 is a 0.8 inch (20.32 mm) height single digit display. This device uses GaAsP RED ORANGE LED chips (GaAsP epi on GaP substrate). The display has a black face and white segments.

DEVICE

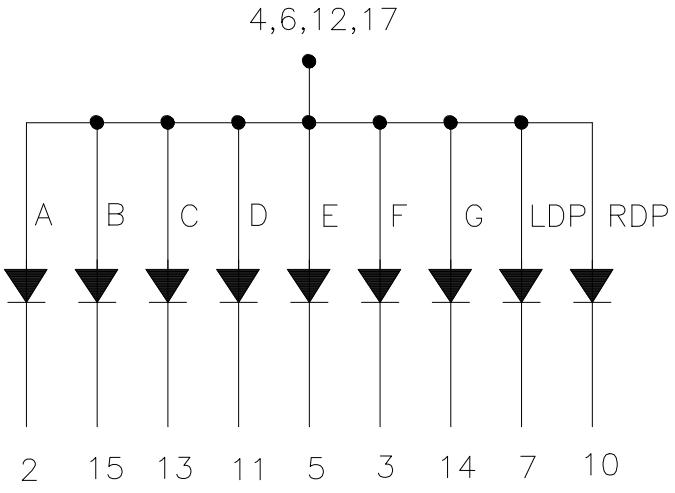
PART NO.	DESCRIPTION
RED ORANGE	Common Anode
LTS-3401LE-03	Rt.&Lt. Hand Decimal

PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerance is ± 0.25-mm (0.01“) unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

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 Forward Current Derating from 25^0C	25 0.33	mA mA/^{0}C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35^0C to +85^0C	
Storage Temperature Range	-35^0C to +85^0C	
Soldering Conditions : 1/16 inch below seating plane for 3 seconds at 260^0C		

*** see figure 5 to establish pulsed condition**

ELECTRICAL / OPTICAL CHARACTERISTICS AT T_A=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	I_V	800	2400		μcd	I_F=10mA
Peak Emission Wavelength	λp		630		nm	I_F=20mA
Spectral Line Half-Width	Δλ		40		nm	I_F=20mA
Dominant Wavelength	λd		621		nm	I_F=20mA
Forward Voltage Per Segment	V_F		2.0	2.6	V	I_F=20mA
Reverse Current Per Segment	I_R			100	μA	V_R=5V
Luminous Intensity Matching Ratio (Similar Light Area)	Iv-m			2:1		I_F=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)

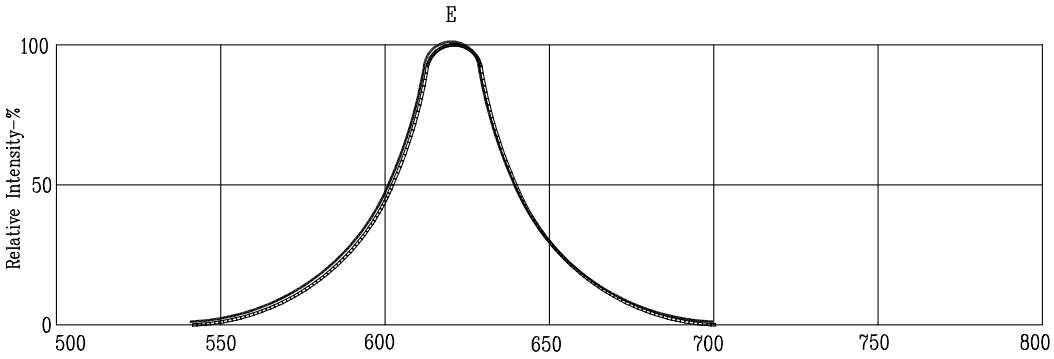


Fig1.Spectral Emission

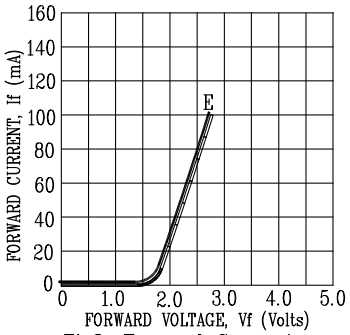


Fig2. Forward Current vs. Forward Voltage

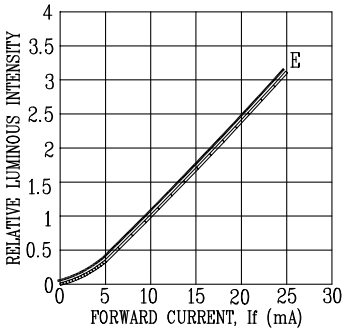


Fig3. Relative Luminous Intensity vs. DC Forward Current

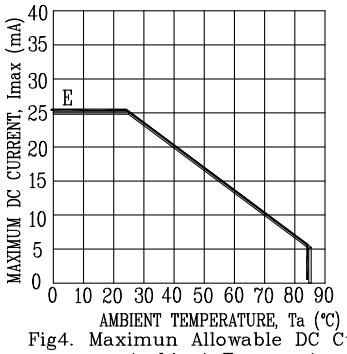


Fig4. Maximun Allowable DC Current vs. Ambient Temperature

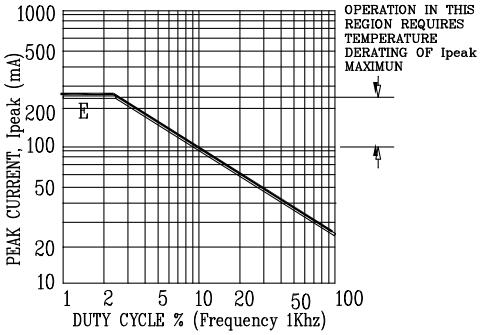


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE: E=RED ORANGE