

FEATURES

- * 2.0 inch (50.8 mm) MATRIX HEIGHT
- * LOW POWER REQUIREMENT
- * SINGLE PLANE, WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * 5 X 7 ARRAY WITH X-Y SELECT
- * COMPATIBLE WITH USASCII AND EBCDIC CODES
- * STACKABLE HORIZONTALLY
- * CATEGORIZED FOR LUMINOUS INTENSITY

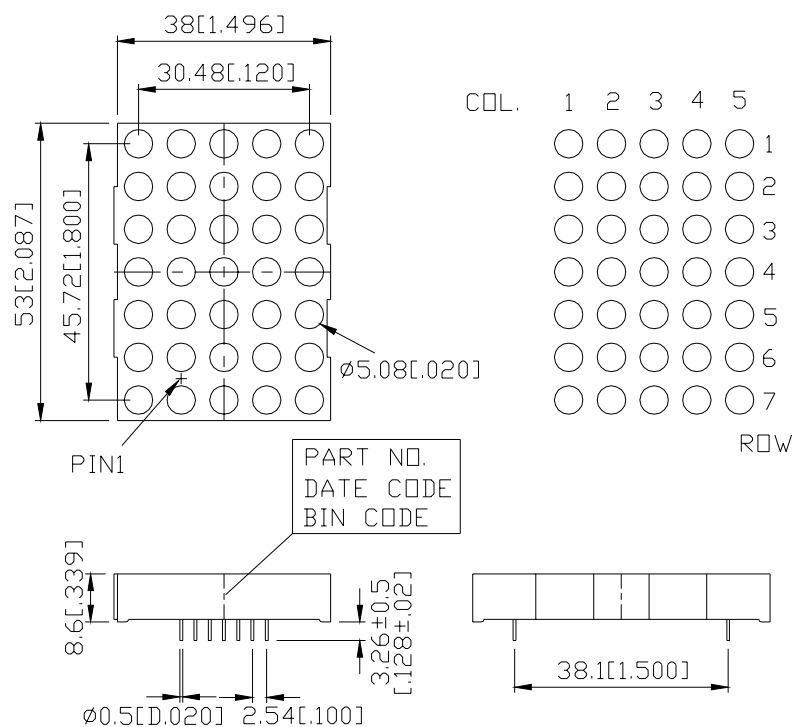
DESCRIPTION

The LTP-2157AHG-01 is a 2.0 inch (50.8 mm) matrix height 5 X 7 dot matrix display. The device uses HIGH EFFICIENCY GREEN LED chips.(GaP epi on GaP substrate). This display has a black face and white dot color.

DEVICE

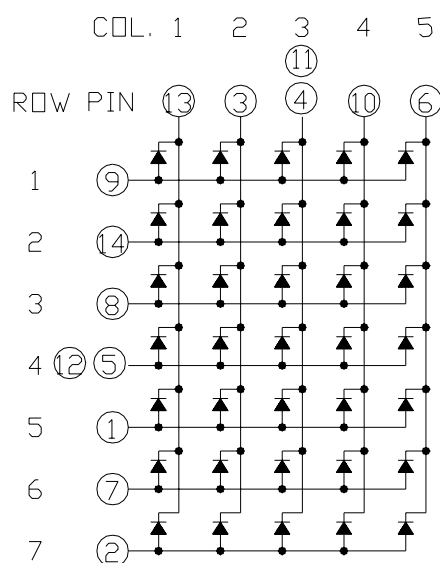
PART NO.	DESCRIPTION
HI-EFF. GREEN	Cathode Column
LTP-2157AHG-01	Anode Row

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
1	ANODE ROW 5
2	ANODE ROW 7
3	CATHODE COLUMN 2
4	CATHODE COLUMN 3
5	ANODE ROW 4
6	CATHODE COLUMN 5
7	ANODE ROW 6
8	ANODE ROW 3
9	ANODE ROW 1
10	CATHODE COLUMN 4
11	CATHODE COLUMN 3
12	ANODE ROW 4
13	CATHODE COLUMN 1
14	ANODE ROW 2

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Average Power Dissipation Per Dot	36	mW
Peak Forward Current Per Dot (Frequency 1Khz, 10% duty cycle)	100	mA
Average Forward Current Per Dot	13	mA
Derating Linear From 25 Per Dot	0.17	mA/
Reverse Voltage Per Dot	5	V
Operating Temperature Range	-35 to +85	
Storage Temperature Range	-35 to +85	
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260 .		

* 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 _v	2300	6300		μcd	I _p = 80mA 1/16Duty
Peak Emission Wavelength	λ _p		565		nm	I _F = 20mA
Spectral Line Half-Width	Δλ		30		nm	I _F = 20mA
Dominant Wavelength	λ _d		569		nm	I _F = 20mA
Forward Voltage any Dot	V _F		2.1	2.6	V	I _F = 20mA
			3.0	3.7		I _F = 80mA
Reverse Current any Dot	I _R			100	μA	V _R = 5V
Luminous Intensity Matching Ratio	I _v -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)

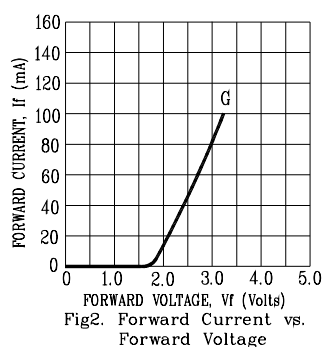
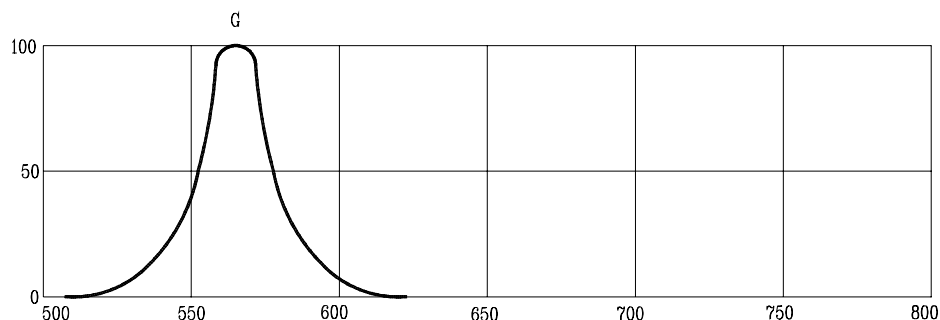


Fig2. Forward Current vs. Forward Voltage

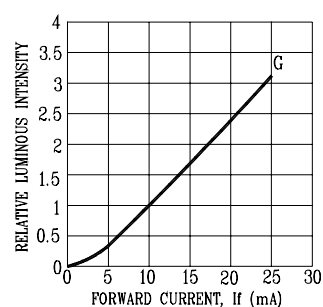


Fig3. Relative Luminous Intensity vs. DC Forward Current

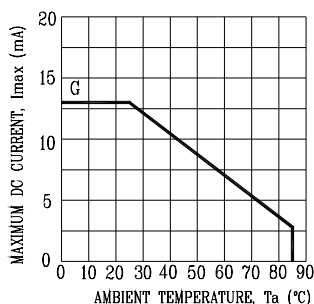


Fig4. Maximum Allowable DC Current vs. Ambient Temperature

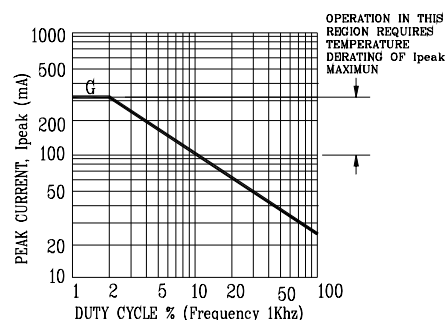


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE: G=GREEN