

FEATURES

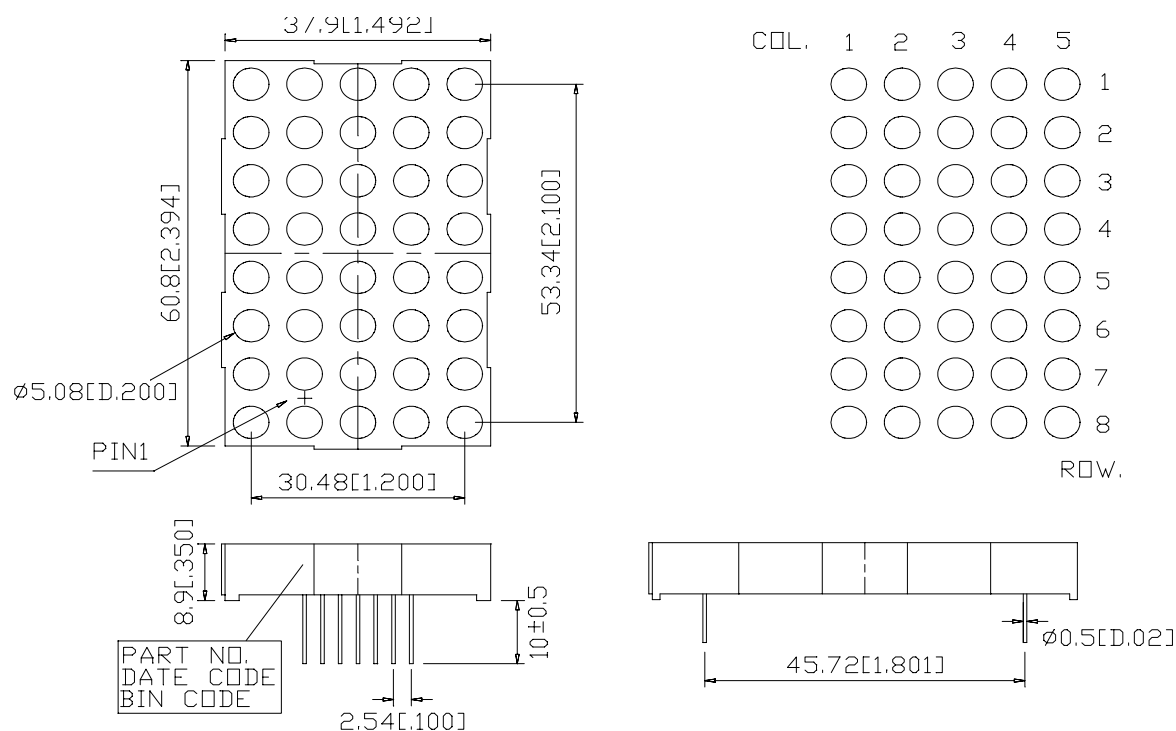
- * 2.3 inch (58.42 mm) MATRIX HEIGHT.
- * LOW POWER REQUIREMENT.
- * SINGLE PLANE, WIDE VIEWING ANGLE.
- * SOLID STATE RELIABILITY.
- * 5x8 ARRAY WITH X-Y SELECT.
- * COMPATIBLE WITH USASCLL AND EBCDIC CODES.
- * STACKABLE HORIZONTALLY.
- * CATEGORIZED FOR LUMINOUS INTENSITY.

DESCRIPTION

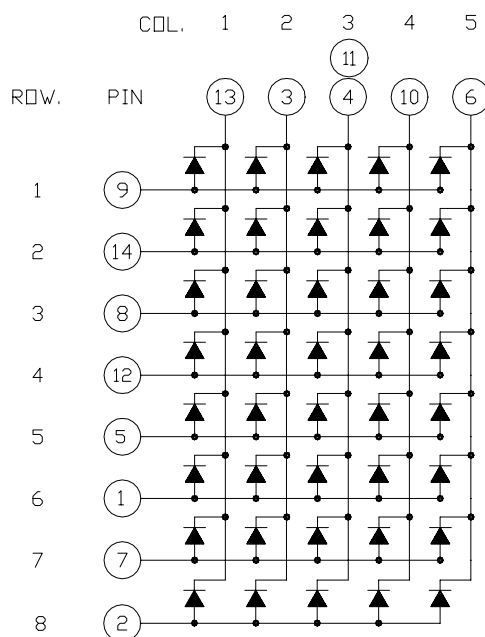
The LTP-2158AHR is a 2.3 inch (58.42 mm) matrix height 5x8 dot matrix display. This device utilizes high efficiency red LED chips, which are made from GaAsP on a transparent GaP substrate, and has a red face and red segments.

DEVICE

PART NO.	DESCRIPTION
Hi-Eff. Red	Cathode Column
LTP-2158AHR	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 6
2	CATHODE ROW 8
3	ANODE COLUMN 2
4	CATHODE COLUMN 3
5	ANODE ROW 5
6	CATHODE COLUMN 5
7	ANODE ROW 7
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 AT T_A=25°C

PARAMETER	MAXIMUM RATING	UNIT
Average Power Dissipation Per Dot	36	mW
Peak Forward Current Per Dot	100	mA
Average Forward Current Per Dot	13	mA
Derating Linear From 25 ⁰ C Per Dot	0.17	mA/ ⁰ C
Reverse Voltage Per Dot	5	V
Operating Temperature Range	-35 ⁰ C to +85 ⁰ C	
Storage Temperature Range	-35 ⁰ C to +85 ⁰ C	
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260 ⁰ C		

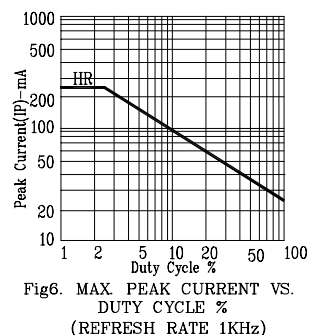
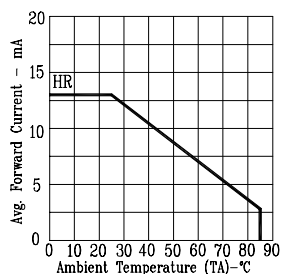
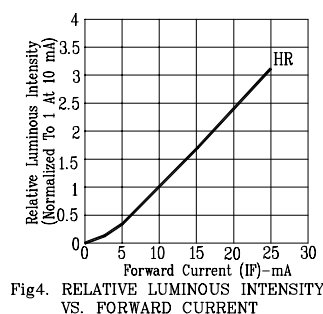
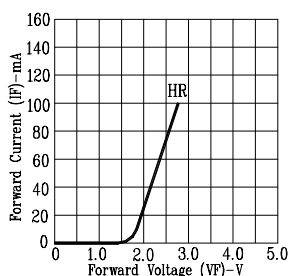
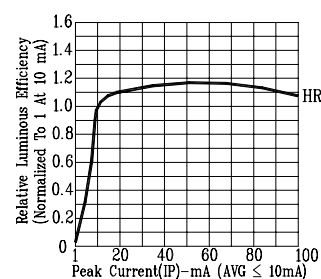
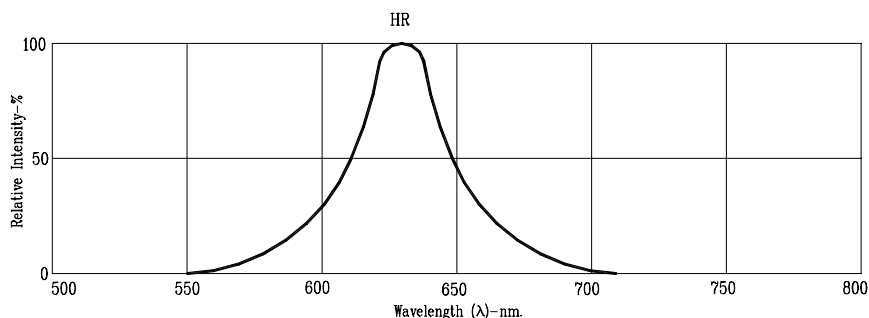
ELECTRICAL / OPTICAL CHARACTERISTICS AT T_A=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	1780	4800		μcd	I _p =80mA 1/16DUTY
Peak Emission Wavelength	λ _p		635		nm	I _F =20mA
Spectral Line Half-Width	Δλ		40		nm	I _F =20mA
Dominant Wavelength	λ _d		623		nm	I _F =20mA
Forward Voltage any Dot	V _F		2	2.6	V	I _F =20mA
			2.6	3.4	V	I _F =80mA
Reverse Current any Dot	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio	I _v -m			2:1		I _p =80mA 1/16DUTY

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)



NOTE: HR=HL-EFF. RED