

**FEATURES**

- \* 1.854 inch (47.1 mm) DIGIT HEIGHT.
- \* LOW POWER REQUIREMENT.
- \* EXCELLENT CHARACTERS AND APPEARANCE.
- \* HIGH CONTRAST.
- \* HIGH BRIGHTNESS.
- \* WIDE VIEWING ANGLE.
- \* 4X4 ARRAY WITH X-Y SELECT.
- \* STACKABLE VERTICALLY AND HORIZONTALLY.

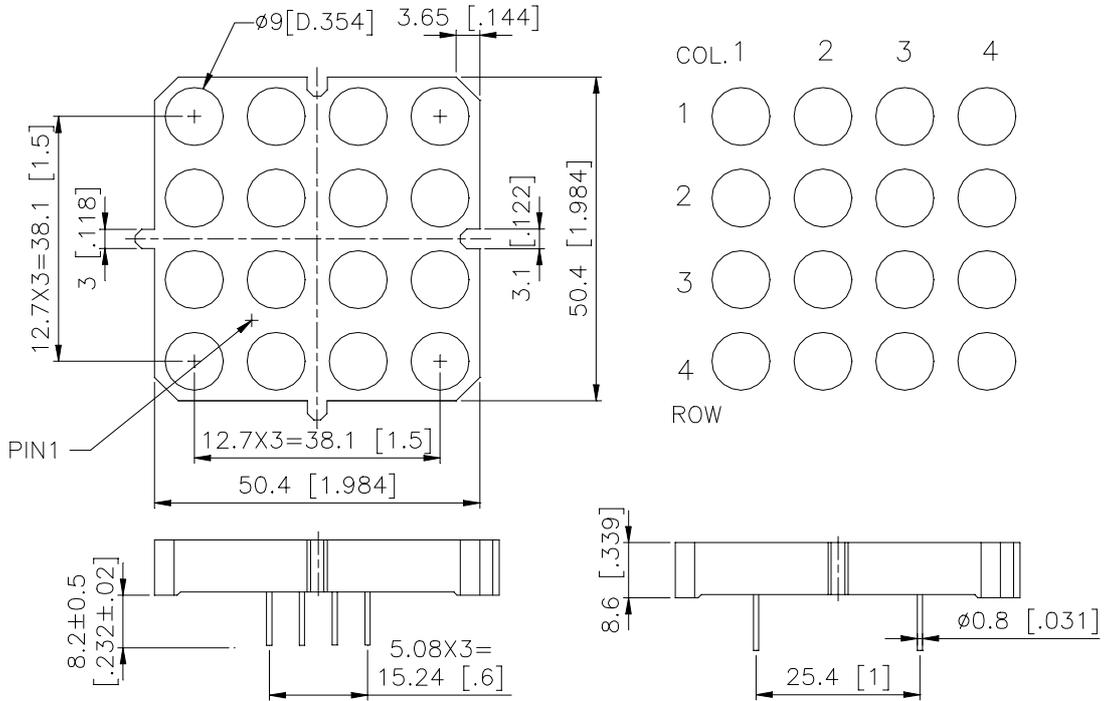
**DESCRIPTION**

The LTP-2344Y is 1.854 inch (47.1 mm) matrix height 4x4 dot matrix display. This device utilizes yellow LED chips, which are made from GaAsP on a GaP substrate, and has a gray face and white dots.

**DEVICE**

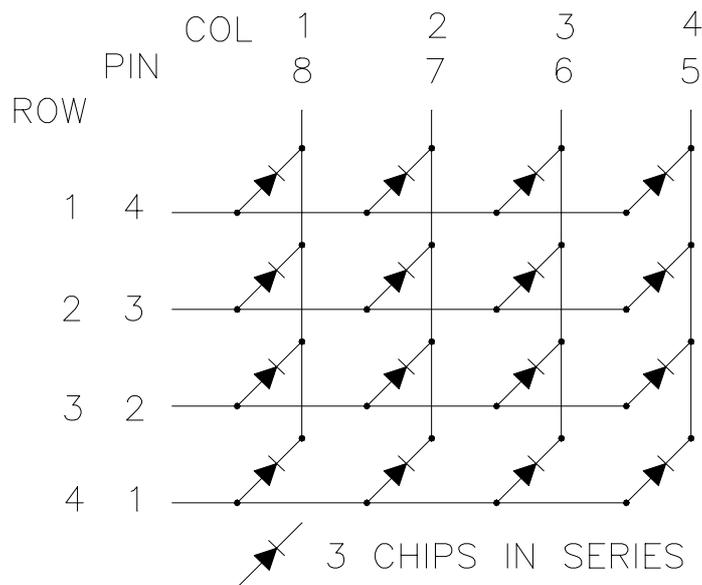
<b>PART NO.</b>	<b>DESCRIPTION</b>
YELLOW	ANODE ROW
LTP-2344Y	CATHODE COLUMN

## PACKAGE DIMENSIONS



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

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

<b>No.</b>	<b>CONNECTION</b>
1	ANODE ROW 4
2	ANODE ROW 3
3	ANODE ROW 2
4	ANODE ROW 1
5	CATHODE COLUMN 4
6	CATHODE COLUMN 3
7	CATHODE COLUMN 2
8	CATHODE COLUMN 1

**ABSOLUTE MAXIMUM RATING AT Ta=25°C**

PARAMETER	MAXIMUM RATING	UNIT
Average Power Dissipation Per Dot	92	mW
Peak Forward Current Per Dot	80	mA
Average Forward Current Per Dot	8	mA
Derating Linear From 25°C Per Dot	0.11	mA/°C
Reverse Voltage Per Segment	15	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°C	
Solder Temperature: max 260°C for max 3sec at 1.6mm[1/16inch] below seating plane.		

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	5.0	11.0		mcd	I <sub>p</sub> =80mA 1/16DUTY
Peak Emission Wavelength	λ <sub>p</sub>		585		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		35		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		588		nm	I <sub>F</sub> =20mA
Forward Voltage Per Chip	V <sub>F</sub>		6.3	7.8	V	I <sub>F</sub> =20mA
			9.0	11.1		I <sub>F</sub> =80mA
Reverse Current Per Chip	I <sub>R</sub>			100	μA	V <sub>R</sub> =15V
Luminous Intensity Matching Ratio	I <sub>v</sub> -m			2:1		I <sub>p</sub> =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)

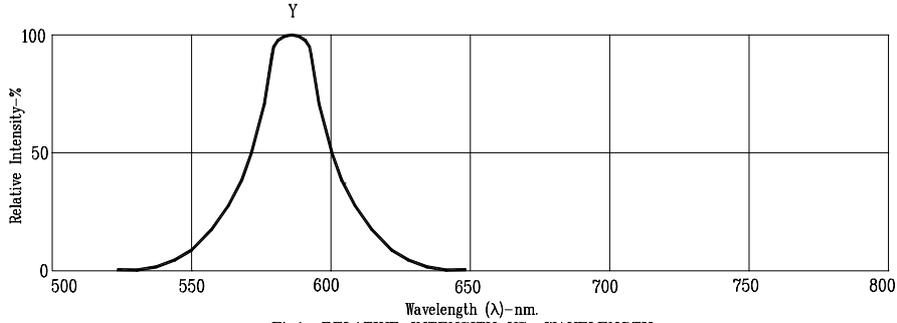


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

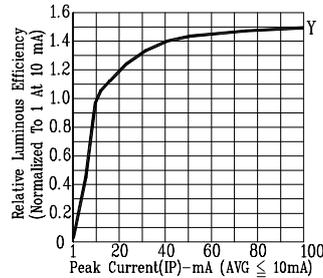


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

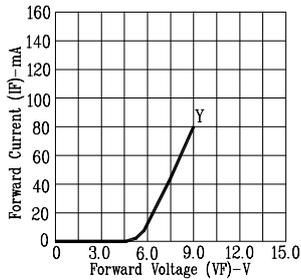


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

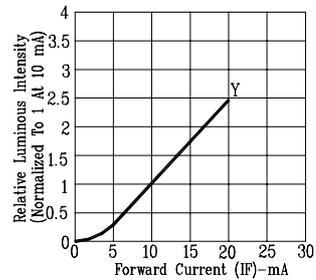


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

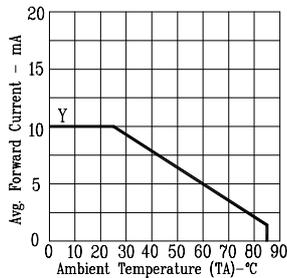


Fig5. MAX. AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

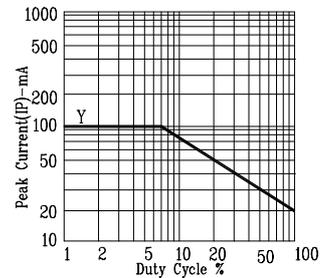


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE : Y=YELLOW