FEATURES

＊3.0-INCH (76.2-mm) MATRIX HEIGHT.
＊LOW POWER REQUIREMENT.
＊SINGLE PLAND, WIDE VIEWING ANGLE.
＊5×7 ARRAY WITH X-Y SELECT.
＊COMPATIBLE WITH USASCII AND EBCDIC CODES.
＊STACKABLE VERTICALLY AND HORIZONTALLY.
＊EASY MOUNTING ON P.C. BOARD.
＊CATEGORIZED FOR LUMINOUS INTENSITY.

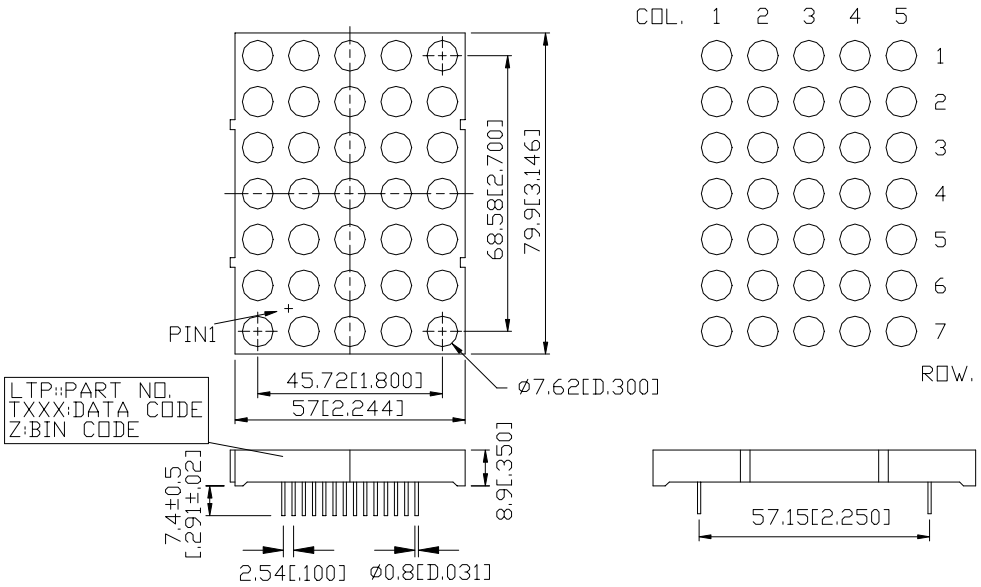
DESCRIPTION

The LTP-3357AA is a 3.0-inch (76.2-mm) matrix height 5×7 dot matrix displays. The device is multicolor applicable displays. The green LED is made from GaP on a transparent GaP substrate. The red orange LED is made from GaAsP on a transparent GaP substrate. The device has a black face and white dots.

DEVICE

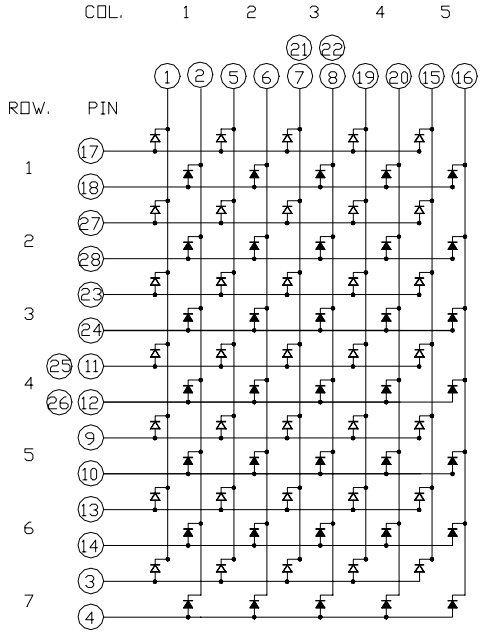
PART NO.	DESCRIPTION
MULTI-COLOR	Cathode Column
LTP-3357AA-NB	Anode Row

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



THE SIGN" ↑ "STANDARD FOR RED ORANGE COLOR 2CHIPS.
THE SIGN" ↕ "STANDARD FOR GREEN COLOR 2CHIPS.

PIN CONNECTION

No.	CONNECTION	No.	CONNECTION
1	CATHODE COLUMN 1 GREEN	15	CATHODE COLUMN 5 GREEN
2	CATHODE COLUMN 1 RED ORANGE	16	CATHODE COLUMN 5 RED ORANGE
3	ANODE ROW 7 GREEN	17	ANODE ROW 1 GREEN
4	ANODE ROW 7 RED ORANGE	18	ANODE 1 RED ORANGE
5	CATHODE COLUMN 2 GREEN	19	CATHODE COLUMN 4 GREEN
6	CATHODE COLUMN 2 RED ORANGE	20	CATHODE COLUMN 4 RED ORANGE
7	CATHODE COLUMN 3 GREEN	21	CATHODE COLUMN 3 GREEN
8	CATHODE COLUMN 3 RED ORANGE	22	CATHODE COLUNMN 3 RED ORANGE
9	ANODE ROW 5 GREEN	23	ANODE ROW 3 GREEN
10	ANODE ROW 5 RED ORANGE	24	ANODE ROW 3 RED ORANGE
11	ANODE ROW 4 GREEN	25	ANODE ROW 4 GREEN
12	ANODE ROW 4 RED ORANGE	26	ANODE ROW 4 RED ORANGE
13	ANODE ROW 6 GREEN	27	ANODE ROW 2 GREEN
14	ANODE ROW 6 RED ORANGE	28	ANODE ROW 2 RED ORANGE

ABSOLUTE MAXIMUM RATING AT T_A=25°C

PARAMETER	GREEN	RED ORANGE	UNIT
Power Dissipation Per Dot	64	64	mW
Peak Forward Current Per Dot (1/10 Duty Cycle, 0.1ms Pulse Width)	90	90	mA
Continuous Forward Current Per Dot Derating Linear From 25°C Per Dot	11 0.15	11 0.15	mA mA/°C
Reverse Voltage Per Dot	10	10	V
Operating Temperature Range	-35°C to +85°C		
Storage Temperature Range	-35°C to +85°C		
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260°C			

ELECTRICAL / OPTICAL CHARACTERISTICS AT T_A=25°C

GREEN

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	3000	9600		μcd	Ip=80mA 1/16Duty
Peak Emission Wavelength	λp		565		nm	IF=20mA
Spectral Line Half-Width	Δλ		30		nm	IF=20mA
Dominant Wavelength	λd		569		nm	IF=20mA
Forward Voltage any Dot	VF		4.2	5.2	V	IF=20mA
			6.0	7.4	V	IF=80mA
Reverse Current any Dot	IR			100	μA	VR=10V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF=10mA

RED ORANGE

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	3000	9600		μcd	Ip=80mA 1/16Duty
Peak Emission Wavelength	λp		630		nm	IF=20mA
Spectral Line Half-Width	Δλ		40		nm	IF=20mA
Dominant Wavelength	λd		621		nm	IF=20mA
Forward Voltage any Dot	VF		4	5.2	V	IF=20mA
			5.2	6.8	V	IF=80mA
Reverse Current any Dot	IR			100	μA	VR=10V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF=10mA

Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (commision internationale DE L'clariage) eye-response curve.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

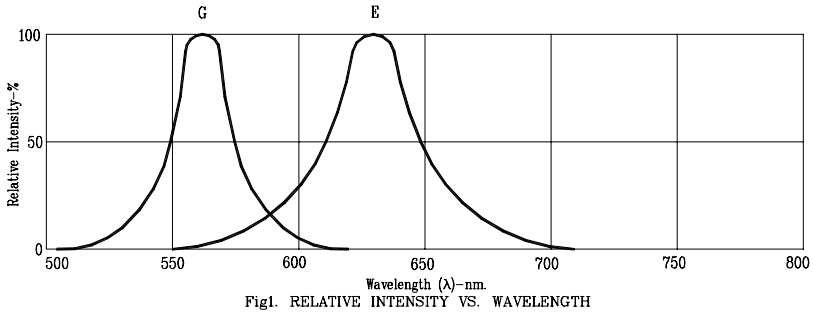


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

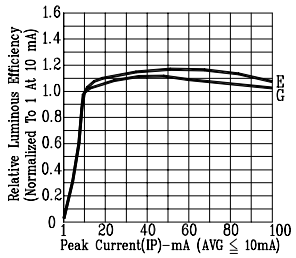


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

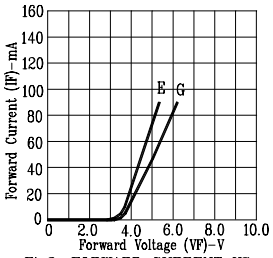


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

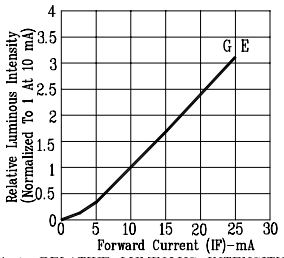


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

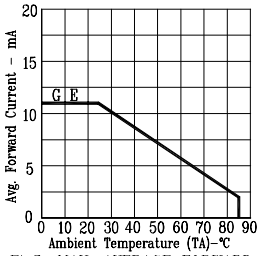


Fig5. MAX. AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE.

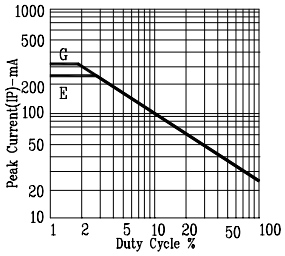


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: G=GREEN E=RED ORANGE