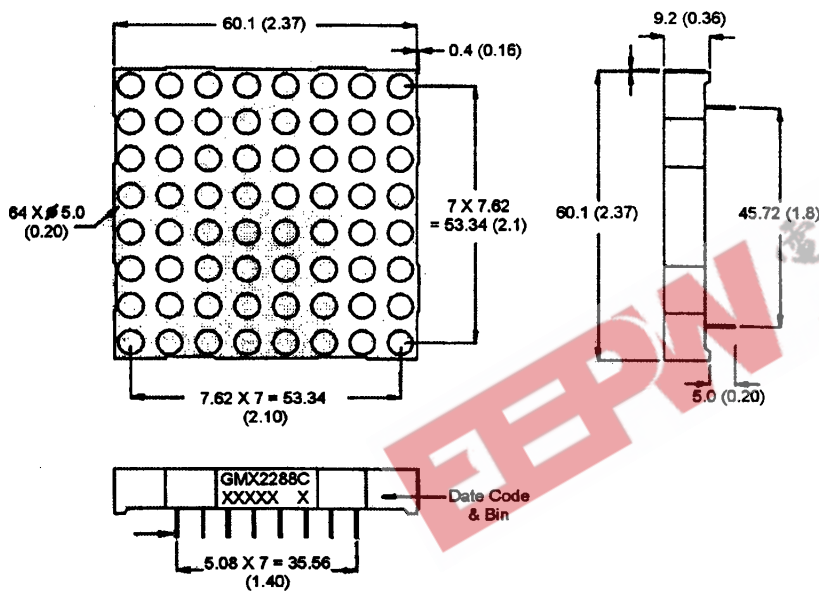


**2.3 INCH (58.4 mm) 8 X 8
DOT MATRIX STICK DISPLAY**

**AlGaAs Red GMA2288C
AlGaAs Red GMC2288C**

PACKAGE DIMENSIONS



DESCRIPTION

The GMX2288C 8 X 8, Single Hetero Junction AlGaAs Red dot matrix display. It has a grey face with neutral segment color.

FEATURES

- 2.3" (58.4mm) character height.
- Low power requirement.
- Wide 130° viewing angle.
- High brightness and contrast
- 8 X 8 array with X-Y select.
- X-Y stackable.
- Easy mounting on P.C. board.

NOTE: Dimensions are in mm (inch).
Tolerances are ± 0.25 (0.1) unless otherwise noted.
All pins are 0.5 (.02).

MODEL NUMBER

<u>Part Number</u>	<u>Colour</u>	<u>Description</u>
GMA2288C	AlGaAs Red	Common anode row.
GMC2288C	AlGaAs Red	Common Cathode row.

(For other color options, contact your local area Sales Office)

ABSOLUTE MAXIMUM RATING ($T_A = 25^\circ\text{C}$ unless otherwise specified)

	AlGaAs Red	Units
Peak forward current per segment (Duty cycle 1/10, 10KHz)	200	mA
Continous IF per segment	30	mA
Power dissipation per segment	100*	mW
*Derate linearly from 25°C	0.5	mW/°C
Reverse voltage VR per segments	5	Volts
Operating and storage temperature range.....		-25°C to +85°C
Soldering time at 260°C..... (1/16" below seating plane)		3 sec

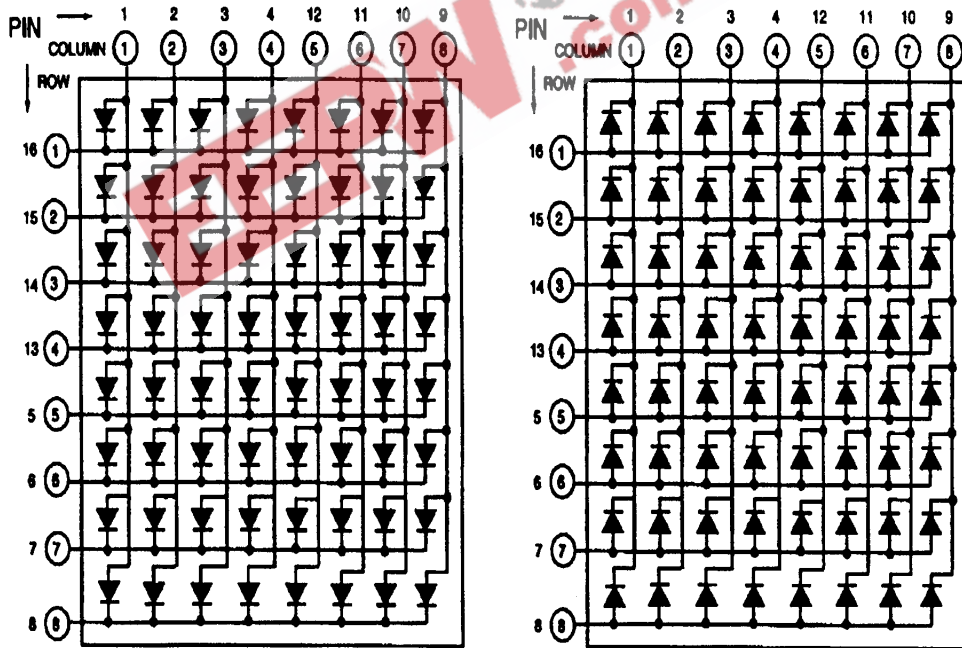
ELECTRO - OPTICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

	AlGaAs Red	Test Condition
Luminous Intensity/Dot Digit average (Typical)	5000ucd	$I_F = 20\text{mA}$
Forward voltage (V_F) typical	1.8V	$I_F = 20\text{ mA}$
maximum	2.5V	$I_F = 20\text{ mA}$
Peak wavelength (nm)	660nm	$I_F = 20\text{ mA}$
Spectral line half width (nm)	20nm	$I_F = 20\text{mA}$
Reverse breakdown voltage V_R	5V	$I_R = 100\text{uA}$

PIN CONNECTION:

GMA2288C		GMC2288C	
Pin Number	Function	Pin Number	Function
1	Cathode Column 1	1	Anode Column 1
2	Cathode Column 2	2	Anode Column 2
3	Cathode Column 3	3	Anode Column 3
4	Cathode Column 4	4	Anode Column 4
5	Anode Row 5	5	Cathode Row 5
6	Anode Row 6	6	Cathode Row 6
7	Anode Row 7	7	Cathode Row 7
8	Anode Row 8	8	Cathode Row 8
9	Cathode Column 8	9	Cathode Column 8
10	Cathode Column 7	10	Cathode Column 7
11	Cathode Column 6	11	Cathode Column 6
12	Cathode Column 5	12	Cathode Column 5
13	Anode Row 4	13	Anode Row 4
14	Anode Row 3	14	Anode Row 3
15	Anode Row 2	15	Anode Row 2
16	Anode Row 1	16	Anode Row 1

SCHEMATIC:



GMC2X88C

GMA2X88C

GRAPHICAL DETAIL: AlGaAs Red ($T_A = 25^\circ\text{C}$ unless otherwise specified)

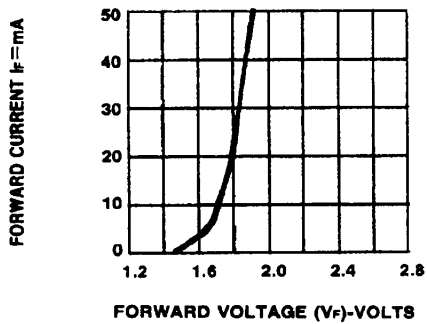


Fig. 1 FORWARD CURRENT VS. FORWARD VOLTAGE.

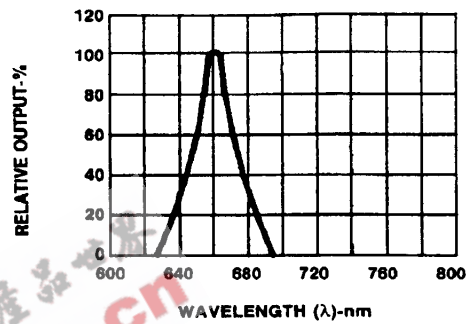


Fig. 2 SPECTRAL RESPONSE

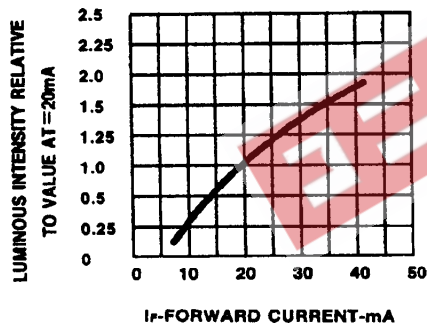


Fig. 3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

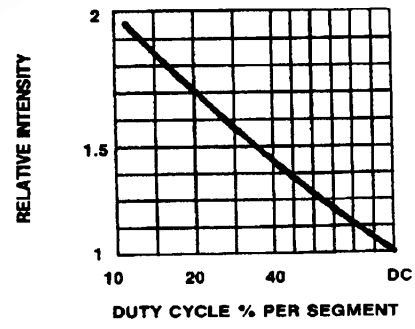


Fig. 5 LUMINOUS INTENSITY VS. DUTY CYCLE (AVERAGE $I_f = 10\text{mA}$)

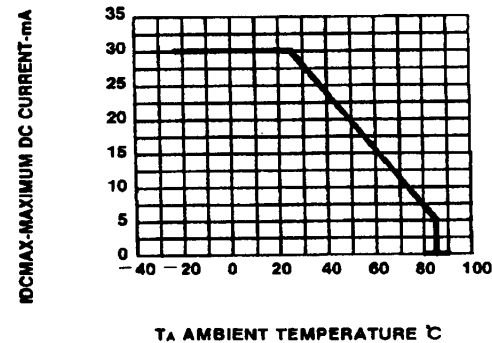


Fig. 4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE.

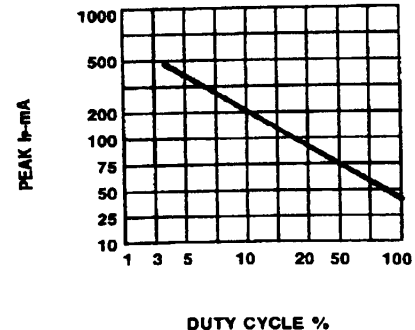


Fig. 6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE $f = 1\text{ kHz}$)

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