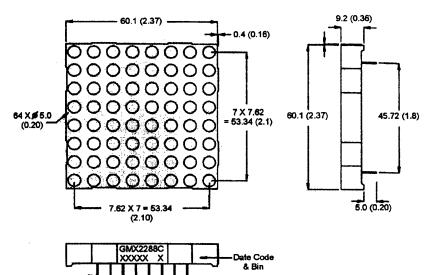


AlGaAs Red GMA2288C AlGaAs Red GMC2288C

#### 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).

5.08 X 7 = 35.56 (1.40)

#### **MODEL NUMBER**

Part Number

Colour

**Description** 

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<sub>A</sub> = 25°C unless otherwise specified)

	AlGaAs Red	Units
Peak forward current per segment	200	m <b>A</b>
(Duty cycle 1/10, 10KHz)		
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
•	***************************************	
(1/16" below seating plane)		

### **ELECTRO - OPTICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C unless otherwise specified)

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

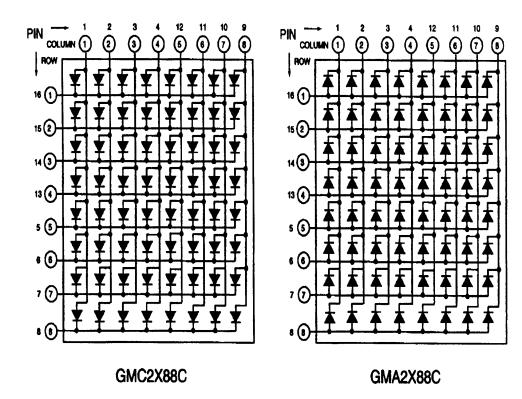


### **PIN CONNECTION:**

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

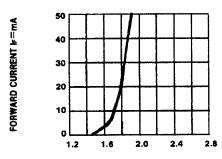


### **SCHEMATIC:**

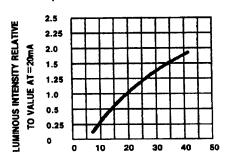




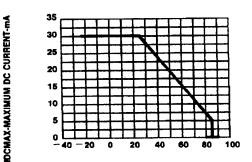
### **GRAPHICAL DETAIL: AlGaAs Red** (T<sub>A</sub> = 25°C unless otherwise specified)



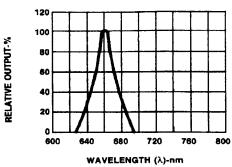
FORWARD VOLTAGE (Vr)-VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.



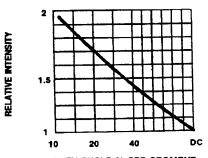
IP-FORWARD CURRENT-MA
Fig.3 RELATIVE LUMINOUS INTENSITY
VS. FORWARD CURRENT



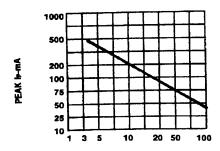
TA AMBIENT TEMPERATURE C Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE.



WAVELENGTH (A)-nm Fig.2 SPECTRAL RESPONSE



DUTY CYCLE % PER SEGMENT
(AVERAGE Is=10mA)
Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE



DUTY CYCLE %
Fig. 6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE 1=1 KHz)



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