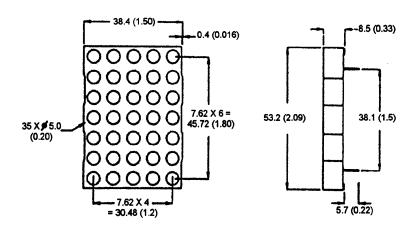


# AlGaAs Red GMA2275C AlGaAs Red GMC2275C

#### PACKAGE DIMENSIONS



#### DESCRIPTION

The GMX2275C 5 X 7, Single Hetero Junction AlGaAs Red dotmatrix display. It has a grey face with neutral segment color.

#### **FEATURES**

2.0" ( 50.8mm) character height. Low power requirement. Wide 130° viewing angle. High brightness and contrast 5 X 7 array with X-Y select. X-Y stackable. Easy mounting on P.C. board.

NOTE:

Date Code

Dimensions are in mm (inch).

Tolerances are ± 0.25 (0.1) unless otherwise noted.

All pins are 0.5 (.02).

GMX2275C

15.24 (0.60)

#### **MODEL NUMBER**

Part Number Colour Description

GMA2275C AlGaAs Red Common anode row.
GMC2275C 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	mA
(Duty cycle 1/10, 10KHz)		
Continous IF per segment	30	m <b>A</b>
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** ( $T_A = 25^{\circ}C$ unless otherwise specified)

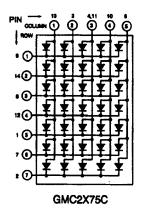
	AlGaAs Red	Test <u>Condition</u>
Luminous Intensity/Dot		
Digit average (Typical)	5000ucd	$I_F = 20mA$
Forward voltage (V <sub>F</sub> )		
typical	1.8V	$I_F = 20 \text{ mA}$
maximum	2.5V	$I_F = 20 \text{ mA}$
Peak wavelength (nm)	660nm	$I_F = 20 \text{ mA}$
Spectral line half width (nm)	<b>20</b> nm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

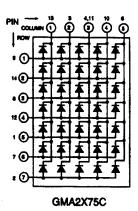


### **PIN CONNECTION:**

GMA2275C			GMC2275C	
Pin Number	Function	Pin Number	Pin Number Function	
1	Anode Row 5	1	Cathode Row 5	
2	Anode Row 7	2	Cathode Row 7	
3	Cathode Column 2	3	Anode Column 2	
4	Cathode Column 3	4	Anode Column 3	
5	Anode Row 4	5	Cathode Row 4	
6	Cathode Column 5	6	Anode Column 5	
7	Anode Row 6	7	Cathode Row 6	
8	Anode Row 3	8	Cathode Row 3	
9	Anode Row 1	9	Cathode Row 1	
10	Cathode Column 4	10	Anode Column 4	
11	Cathode Column 3	11	Anode Column 3	
12	Anode Row 4	12	Cathode Row 4	
13	Cathode Column 1	13	Anode Column 1	
14	Anode Row 2	14	Cathode Row 2	

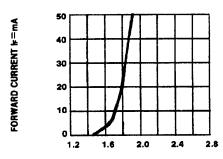
### **SCHEMATIC:**



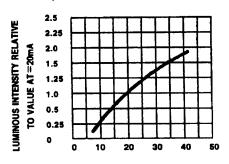




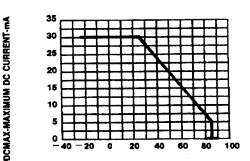
### **GRAPHICAL DETAIL: AIGaAs Red** (T<sub>A</sub> = 25°C unless otherwise specified)



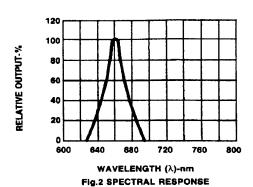
FORWARD VOLTAGE (Vr)-VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

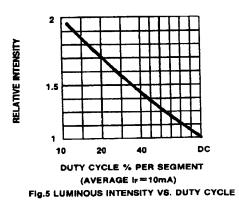


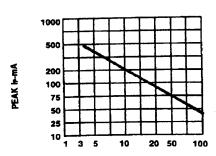
Ir-FORWARD CURRENT-MA
Fig.3 RELATIVE LUMINOUS INTENSITY
VS. FORWARD CURRENT



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







DUTY CYCLE %
Fig. 8 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE 1-1 KMz)



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