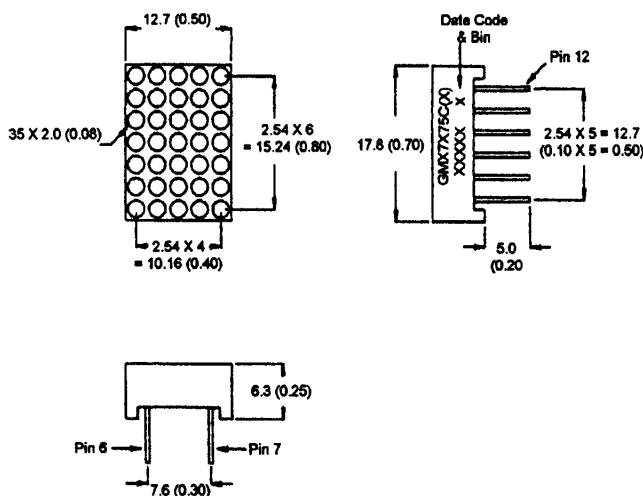


**Superbright Red GMX7275C
Superbright Red GMX7275CA**

PACKAGE DIMENSIONS



DESCRIPTION

The GMX7275C(X) a 5 X 7, Superbright red dotmatrix display. Populated with GaAlAs/GaAs Single Hetero Junction LEDs, it has a grey face with white segment color.

FEATURES

- 0.7" (17.2mm) 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: Dimensions are in mm (inch).
Tolerances are ± 0.25 (0.1) unless otherwise noted.
All pins are 0.5 (.02).

MODEL NUMBERS

<u>Part Number</u>	<u>Colour</u>	<u>Description</u>
GMA7275C	AlGaAs Red	Common anode row.
GMA7275CA	AlGaAs Red	Common anode row, alternate pin-out.
GMC7275C	AlGaAs Red	Common cathode row.
GMC7275CA	AlGaAs Red	Common cathode row, alternate pin-out.

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

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

	Superbright Red	Units
Peak forward current per segment (Duty cycle 1/10, 10KHz)	200	mA
Continuous IF per segment	30	mA
Power dissipation per segment	100*	mW
*Derate linearly from 25°C	0.5	mW/°C
Reverse voltage VR per segment	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)

	Superbright 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	$I_R = 100 \mu\text{A}$

PIN CONNECTION:

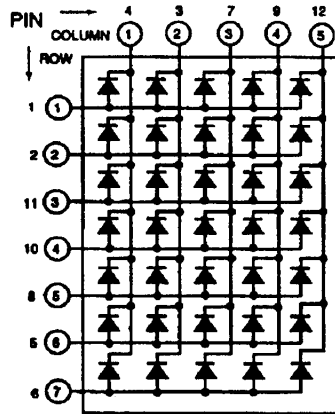
GMX7X75C

GMA7X75C		GMC7X75C	
Pin Number	Function	Pin Number	Function
1	Anode Row 1	1	Cathode Row 1
2	Anode Row 2	2	Cathode Row 2
3	Cathode Column 2	3	Anode Column 2
4	Cathode Column 1	4	Anode Column 1
5	Anode Row 6	5	Cathode Row 6
6	Anode Row 7	6	Cathode Row 7
7	Cathode Column 3	7	Anode Column 3
8	Anode Row 5	8	Cathode Row 5
9	Cathode Column 4	9	Anode Column 4
10	Anode Row 4	10	Cathode Row 4
11	Anode Row 3	11	Cathode Row 3
12	Cathode Column 5	12	Anode Column 5

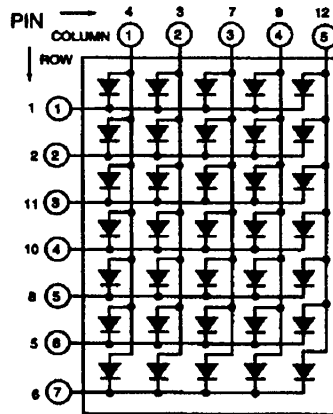
GMX7X75CA

GMC7X75CA		GMA7X75CA	
Pin Number	Function	Pin Number	Function
1	Anode Column 1	1	Cathode Column 1
2	Cathode Row 3	2	Anode Row 3
3	Anode Column 2	3	Cathode Column 2
4	Cathode Row 5	4	Anode Row 5
5	Cathode Row 6	5	Anode Row 6
6	Cathode Row 7	6	Anode Row 7
7	Anode Column 4	7	Cathode Column 3
8	Anode Column 5	8	Cathode Column 5
9	Cathode Row 4	9	Anode Row 4
10	Anode Column 3	10	Cathode Column 3
11	Cathode Row 2	11	Anode Row 2
12	Cathode Row 1	12	Anode Row 1

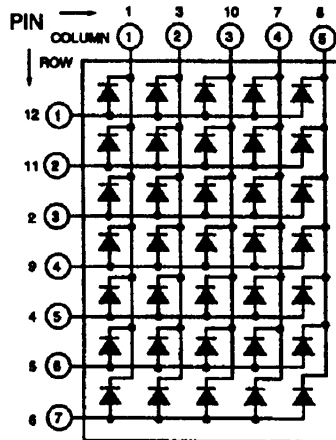
SCHEMATICS:



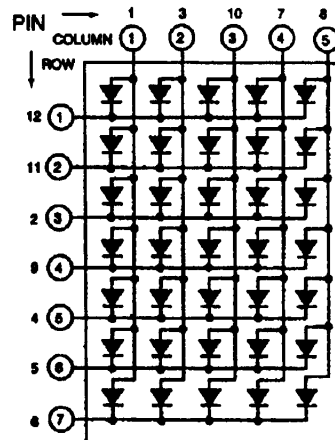
GMA7X75C



GMC7X75C



GMA7X75CA



GMC7X75CA

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

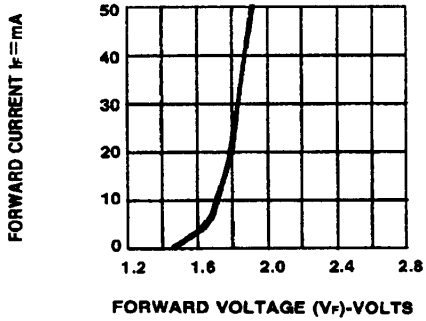


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

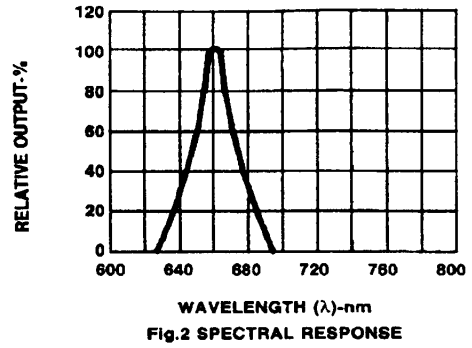


Fig.2 SPECTRAL RESPONSE

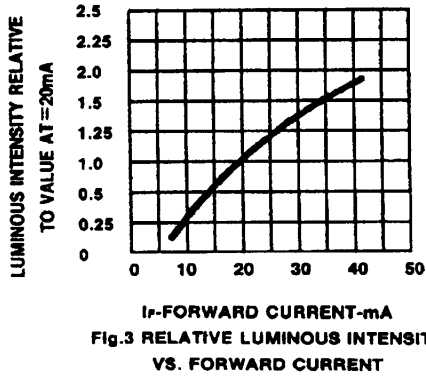


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

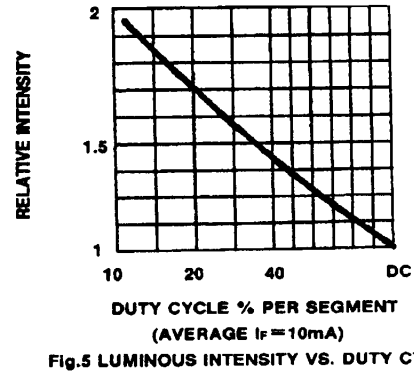


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE (AVERAGE $I_f = 10\text{mA}$)

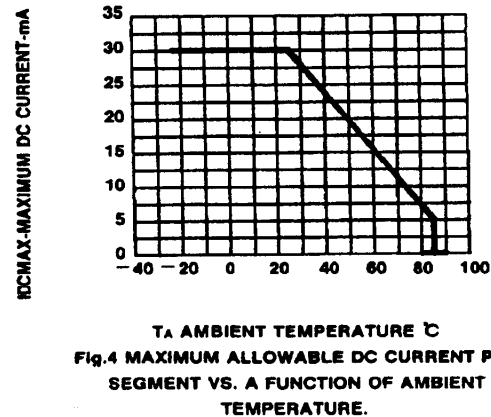


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE.

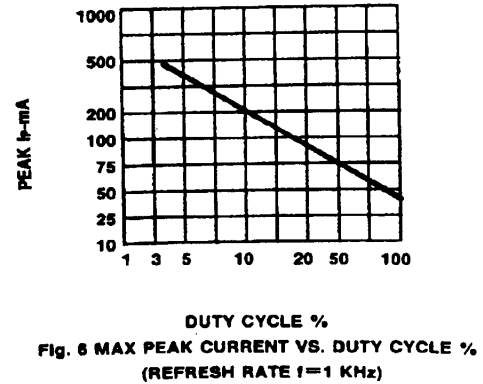


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE $f = 1\text{KHz}$)



FAIRCHILD

SEMICONDUCTOR™

0.7 INCH (17.2mm) 5 X 7 DOT MATRIX STICK DISPLAY

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