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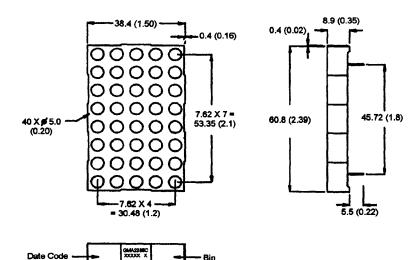






## AlGaAs Red GMA2285C AlGaAs Red GMC2285C

#### PACKAGE DIMENSIONS



#### DESCRIPTION

The GMX2285C 5 X 8, Single Hetero Junction AlGaAs Red dot matrix display. It has a grey face with neutral segment color.

#### **FEATURES**

2.5" (58.4mm) character height. Low power requirement. Wide 130° viewing angle. High brightness and contrast 5 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).

جا 2.54 X 6 احد = 15.24 (0.60)

#### **MODEL NUMBER**

Part Number

Colour

**Description** 

GMA2285C GMC2285C AlGaAs Red AlGaAs Red

Common anode row.
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            | 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)             |               |       |

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

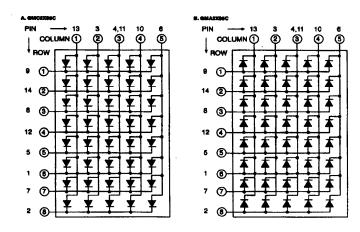
|  | AlGaAs Red   | Test<br><u>Condition</u> |
|--|--------------|--------------------------|
| Luminous Intensity/Dot                   |              |                          |
| Digit average (Typical)                  | 5000ucd      | $l_F = 20mA$             |
| Forward voltage (V <sub>F</sub> )        |              |                          |
| typical                                  | 1.8V         | I <sub>F</sub> = 20 mA   |
| maximum                                  | 2.5V         | $l_F = 20 \text{ mA}$    |
| 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:**

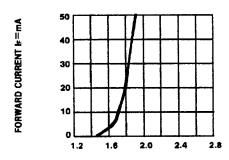
| GMA2285C   |                  |            | GMC2285C       |  |
|------------|------------------|------------|----------------|--|
| Pin Number | Function         | Pin Number | Function       |  |
| 1          | Anode Row 6      | 1          | Cathode Row 6  |  |
| 2          | Anode Row 8      | 2          | Cathode Row 8  |  |
| 3          | Cathode Column 2 | 3          | Anode Column 2 |  |
| 4          | Cathode Column 3 | 4          | Anode Column 3 |  |
| 5          | Anode Row 5      | 5          | Cathode Row 5  |  |
| 6          | Cathode Column 5 | 6          | Anode Column 5 |  |
| 7          | Anode Row 7      | 7          | Cathode Row 7  |  |
| 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:**

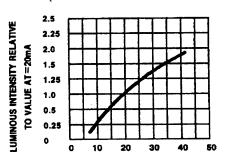




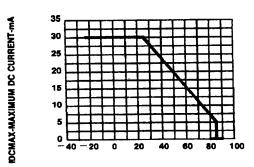
### **GRAPHICAL DETAIL: AlGaAs Red** (T<sub>A</sub> = 25°C unless otherwise specified)



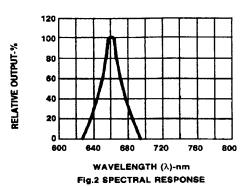
FORWARD VOLTAGE (Vr)-VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

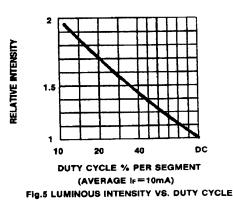


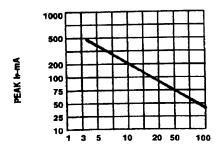
IP-FORWARD CURRENT-MA
Fig.3 RELATIVE LUMINOUS INTENSITY
VS. FORWARD CURRENT



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







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



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