Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

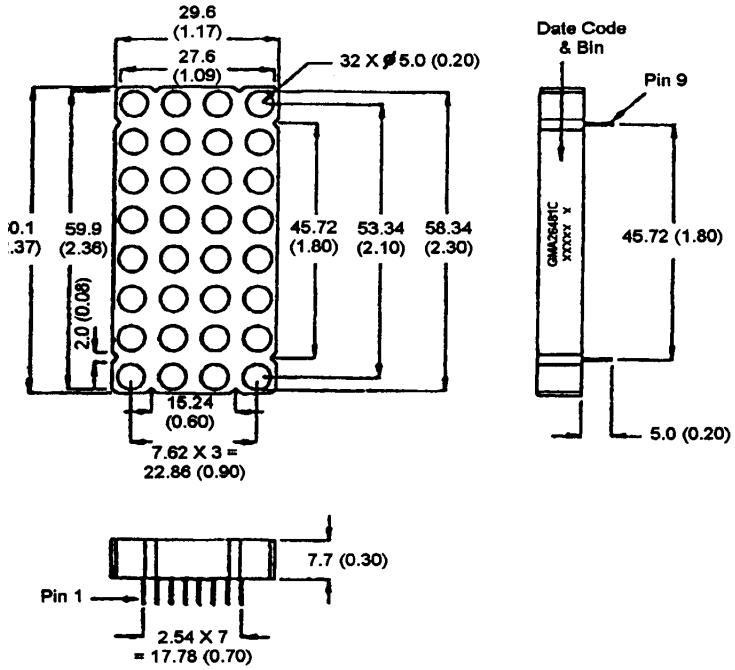
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

FAIRCHILD
SEMICONDUCTOR™

2.3 INCH (58.4 mm) 4 X 8 DOT MATRIX STICK DISPLAY

HER Red / Green GMA26481C (BI-COLOR)

PACKAGE DIMENSIONS



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

DESCRIPTION

The GMA26481C a common cathode column 4 X 8, bicolor High Efficiency Red / green dot matrix display. It has a black face with neutral segment color.

FEATURES

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

MODEL NUMBER

Part Number	Colour	Description
GMA26481C	HER Red/Green	Common anode row.

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

FAIRCHILD
SEMICONDUCTOR™

2.3 INCH (58.4 mm) 4 X 8 DOT MATRIX STICK DISPLAY

ABSOLUTE MAXIMUM RATING (T_A = 25°C unless otherwise specified)

	HER	Green	Units
Peak forward current per segment (Duty cycle 1/10, 10KHz)	90	90	mA
Continous IF per segment	25	25	mA
Power dissipation per segment	70*	70	mW
*Derate linearly from 25°C	0.33	0.33	mW/°C
Reverse voltage VR per segment	5	5	Volts

Operating and storage temperature range.....-25°C to +85°C

Soldering time at 260°C.....3 sec
(1/16" below seating plane)

ELECTRO - OPTICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

	HER	Green	Test Condition
Luminous Intensity/Dot Digit average (Typical)	2200ucd	1600ucd	I_F = 20mA
Forward voltage (V_F)			
typical	2.0V	2.1V	I_F = 20 mA
maximum	2.8V	2.8V	I_F = 20 mA
Peak wavelength (nm)	635nm	570nm	I_F = 20 mA
Spectral line half width (nm)	45nm	30nm	I_F = 20mA
Reverse breakdown voltage V_R	5V	5V	I_R = 100uA

FAIRCHILD
SEMICONDUCTOR™

2.3 INCH (58.4 mm) 4 X 8 DOT MATRIX STICK DISPLAY

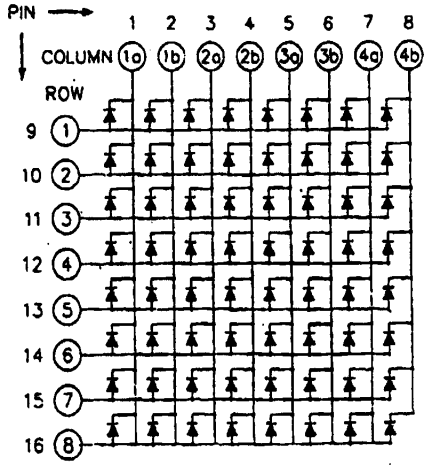
PIN CONNECTION:

GMA3688C

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

Note "a" = High Efficiency Red LED
"b" = Green LED

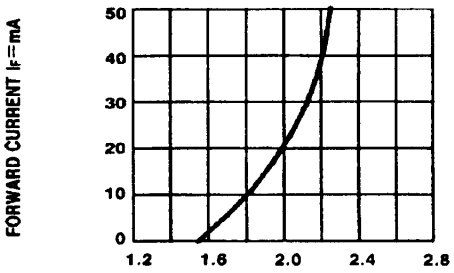
SCHEMATIC:



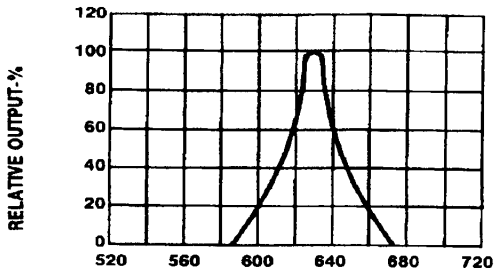
FAIRCHILD
SEMICONDUCTOR™

2.3 INCH (58.4 mm) 4 X 8 DOT MATRIX STICK DISPLAY

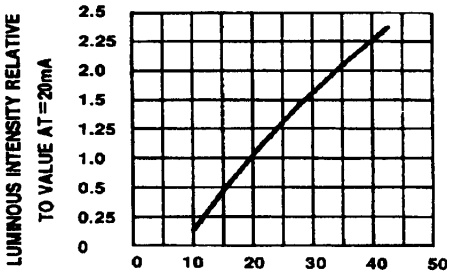
GRAPHICAL DETAIL: High Efficiency Red (T_A = 25°C unless otherwise specified)



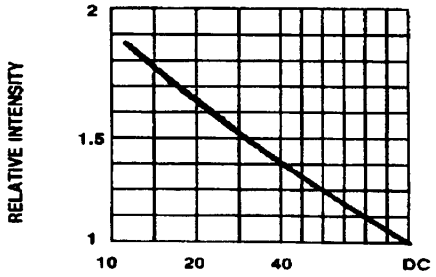
FORWARD VOLTAGE (V_F)-VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.



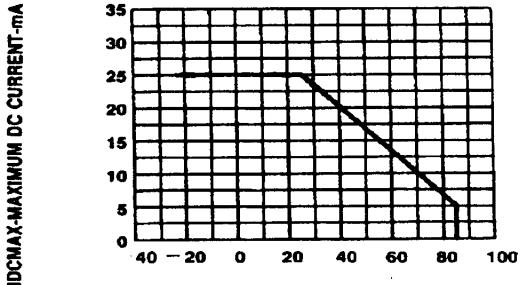
WAVELENGTH (λ)-nm
Fig.2 SPECTRAL RESPONSE



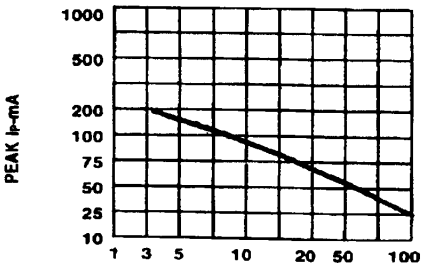
I_F-FORWARD CURRENT-mA
Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



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



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

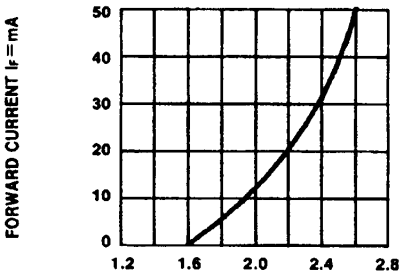


DUTY CYCLE %
Fig. 6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE f=1 KHz)

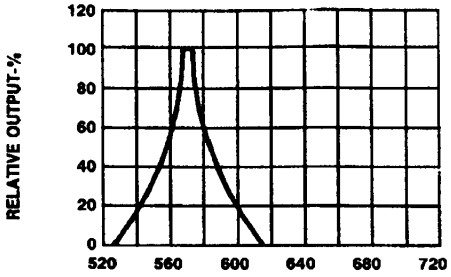
FAIRCHILD
SEMICONDUCTOR™

2.3 INCH (58.4 mm) 4 X 8 DOT MATRIX STICK DISPLAY

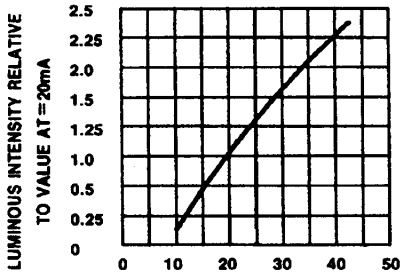
GRAPHICAL DETAIL: Green (T_A = 25°C unless otherwise specified)



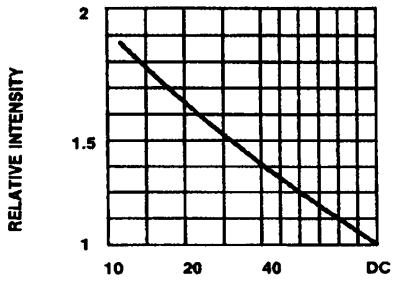
FORWARD VOLTAGE (V_F)-VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.



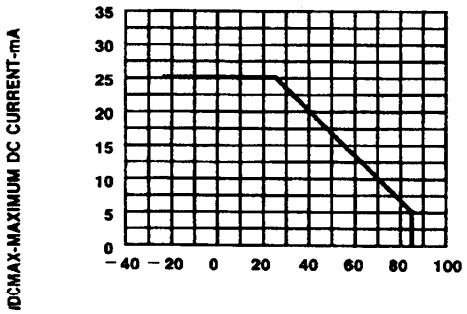
WAVELENGTH (λ)-nm
Fig.2 SPECTRAL RESPONSE



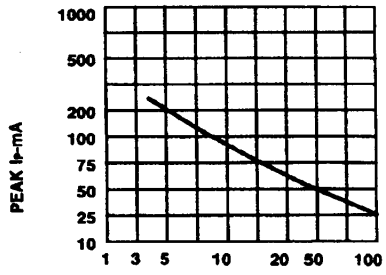
I_F-FORWARD CURRENT-mA
Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



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



T_A AMBIENT TEMPERATURE °C
Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT CS. A FUNCTION OF AMBIENT TEMPERATURE.



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

FAIRCHILD
SEMICONDUCTOR™

2.3 INCH (58.4 mm) 4 X 8 DOT MATRIX STICK DISPLAY

DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE PRESIDENT OF FAIRCHILD SEMICONDUCTOR CORPORATION. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.