

4 X 16 DOT MATRIX (5 X 7), ALPHA NUMERIC, GAS-PLASMA DISPLAY

The DM-0416-01C is a dc-plasma subsystem with character fields of 4 lines of 16 characters. The use of plasma technology provides a bright (90 fL typical) neon-orange display, with a wide 130° viewing angle. Using a 5x7 matrix of dots forms the display's characters. This format allows for the representation of 256 characters including ASCII fonts, numerals, punctuation, and commonly used scientific symbols.

The hardware design of the DM-0416-01C includes an on-board dc-dc converter which generates all the voltages required to drive the display and allows the subsystem to be operated from a single +5Vdc power supply. Also included is a microprocessor which serves display refresh and character input, and implements many editing control codes and commands.

The DM-0416 display subsystem is interfaced to the host system over a TTL level 8-bit data bus. ASCII character data or control words can be written to the subsystem, and busy status can be read by the host for maximum loading speed.

SPECIFICATIONS***Absolute Maximum Ratings***

PARAMETER	SYM	MIN	MAX	UNITS
Supply Voltage	V _{CC}	-	+5.25	Volts
High Level Input Voltage	V _{IH}	-	V _{CC}	Volts
Low Level Input Voltage	V _{IL}		-0.8	Volts
Vibration (Sine) (10 -55 Hz)		-	10	G
Shock Non-Operating				
x-plane (5 times, 9 ms MIL-STD-202A)		-	2	G
y-plane (5 times, 9 ms MIL-STD-202A)		-	2	G
z-plane (5 times, 9 ms MIL-STD-202A)		-	10	G

Recommended Operating Conditions

PARAMETER	SYM	MIN	TYP	MAX	UNITS
Logic Supply Voltage	V _{CC}	4.75	5.0	5.25	Volts
Logic Supply Current	I _{CC}	-	2.5	3.0	Amps
High Level Output Current	I _{OH}	-	-	-2.6	mA
High Level Input Voltage	V _{IH}	2.0	-	V _{CC}	VDC
Low Level Input Voltage	V _{IL}	-0.5	-	0.8	VDC
High Level Output Voltage	V _{OH}	2.4	-	-	VDC
Low Level Output Voltage	V _{OL}	-	-	0.45	VDC
Low Level Output Current	I _{OL}	-	-	24	mA

Environmental Characteristics

Operating Temperature	0 to 55 °C
Storage Temperature	-40 to +85 °C
Operating Relative Humidity	10 to 90% non-condensing

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MODEL: **DM-0416-01C**

DISPLAY PRODUCTS DIVISION

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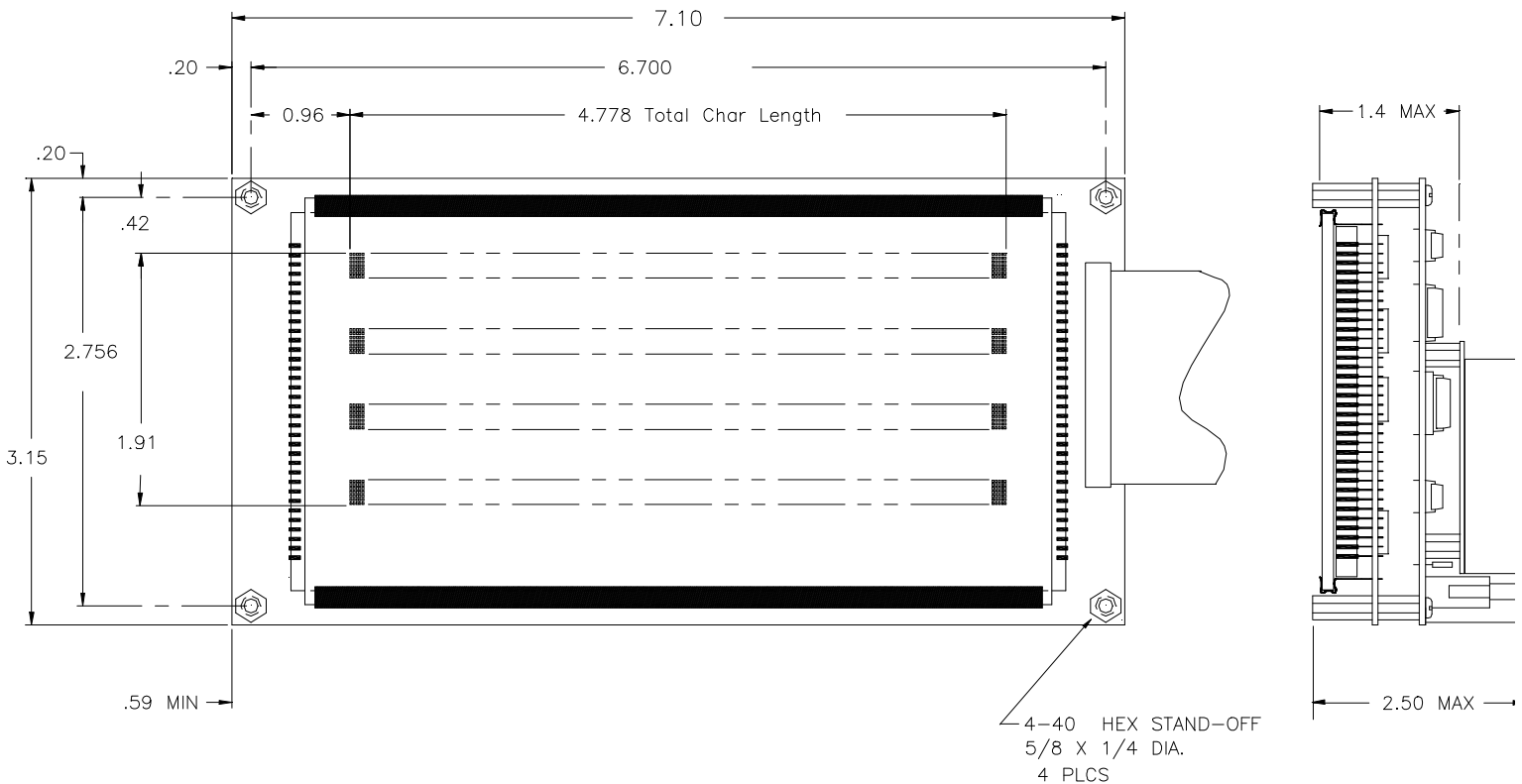
J5- Power Connector

Pin Number	Function
1	+5 VDC
2	GND
3	N/C

J4 - Data Connector

Pin Number	Function	Pin Number	Function
1	Data 2 ⁰	9	Data 2 ⁴
2	N1 HOME	10	N5 CUR. ON/OFF
3	Data 2 ¹	11	Data 2 ⁵
4	N2 SELF TEXT	12	N6 RESET
5	Data 2 ²	13	Data 2 ⁶
6	N3 GND	14	N7 WR
7	Data 2 ³	15	Data 2 ⁷
8	N4 BUSY	16	CUR. LD.

Outline and Mounting Drawing:



SPECIFICATIONS ARE FOR REFERENCE ONLY

9200-0104 Rev. A

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