BABCOCK

DISPLAY PRODUCTS DIVISION

MODEL: **GD-120C280-01C**

280 x 120 DOT MATRIX, GAS-PLASMA DISPLAY WITH CONTROLLER

The dc-plasma, easy-to-read, fully populated, graphic display is arranged as 280 columns by 120 rows and features bright neon-orange pixels, wide viewing angle (130°), and sharp contrast. The slim profile, compact outline, and large viewing area make efficient use of valuable system, front panel space. Inherently rugged, dc-plasma displays are a cost-effective solution when overcoming vibration, temperature, or EMI/RFI issues.

GD-120C280-01C dc-plasma display has a built in controller and a dc to dc converter. The GD-120C280-01C display controller provides an easy way to interface through a bi-directional 8-bit parallel bus with handshaking to the user's host controller. The onboard dc-dc converter provides all the high voltage and intermediate biasing requirements of the dc plasma display panel.

FEATURES

- Overall size: 10.90" x 5.90" x 1.78" max
- Active Area: 8.38" x 4.54"
- Pixel Size: 0.015"sq.
- Pixel Pitch: 0.030" x 0.038"
- Voltages: +5Vdc@ 0.25A max, +12Vdc@ 3A max
- Compact design
- 8 Lines Bi-Directional Bus
- Color: Neon Orange
- Luminance of 25 fL min
- 130° viewing angle

SPECIFICATIONS

Absolute Maximum Ratings

PARAMETER	SYM	MIN	MAX	UNITS
Logic Supply Voltage	V_{CC}	-0.5	+7.0	VDC
Converter Voltage Supply	V_{CC2}		+ 13.5	VDC
High Level Input Voltage	V_{IH}		V_{CC}	VDC
Low Level Input Voltage	V_{IL}	0	-	VDC
Shock Non-Operating				
x-plane (5 times, 9 ms MIL-STD-202A)		-	2.5	G
y-plane (5 times, 9 ms MIL-STD-202A)		-	2.5	G
z-plane (5 times, 9 ms MIL-STD-202A)		-	5	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_{CC1}			0.25	A
Converter Supply Voltage	V_{CC2}	11.4	12.0	12.6	VDC
Converter Supply Current	I_{CC2}			3.0	A
High Level Input Voltage	V_{IH}	3.5	-	V_{CC}	VDC
High Level Output Current (V_{OH} = 2.4 VDC)	I_{OH}			2.5	mA
Low Level Input Voltage	V_{IL}	0	-	0.8	VDC
Low Level Output Current (V_{OL} = 0.45 VDC)	I_{OL}	-	-	-2.5	mA
High Level Output Voltage	V_{OH}	3.0	-	-	VDC
Low Level Output Voltage	V_{OL}	-	-	0.4	VDC

Environmental Characteristics

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

SPECIFICATIONS ARE FOR REFERENCE ONLY

9200-0093 Rev. A

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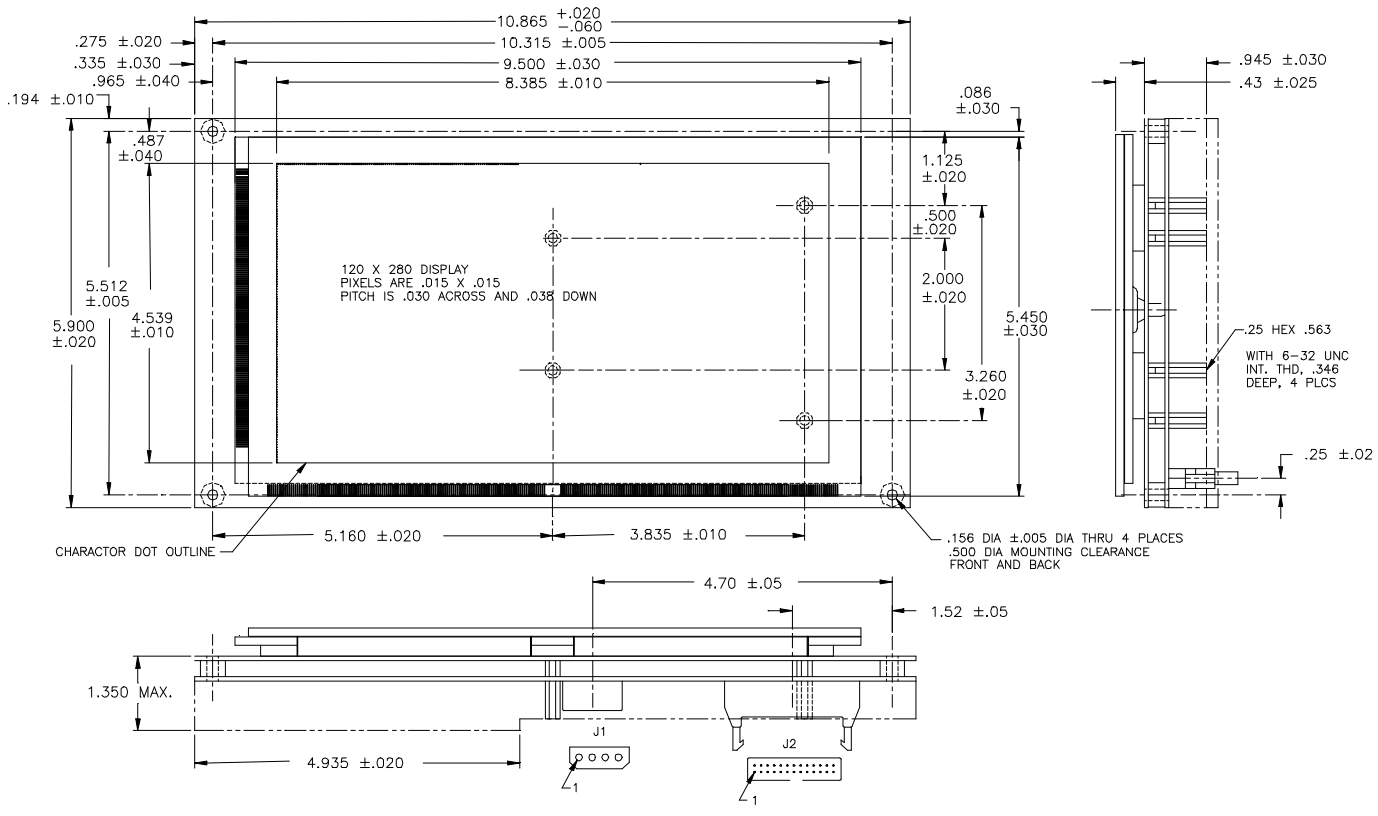
J1- Power Connector

Pin Number	Function
1	+12 VDC @ 3A MAX
2	+5V RTN
3	+12V RTN
4	+5V VDC @ .25A MAX

J2 - Data Connector

Pin Number	Function	Pin Number	Function
1	Data Bit 0	14	N.C.
2	Ground	15	Data Bit 7
3	Data Bit 1	16	N.C.
4	B/D	17	$\overline{WR}$
5	Data Bit 2	18	N.C.
6	A0	19	$\overline{US}$
7	Data Bit 3	20	N.C.
8	N.C.	21	$\overline{RD}$
9	Data Bit 4	22	N.C.
10	N.C.	23	$\overline{CLR}$
11	Data Bit 5	24	BUSY
12	$\overline{CHK}$	25	$\overline{BL}$
13	Data Bit 6	26	Ground

Outline and Mounting Drawing:



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