BABCOCK
DISPLAY PRODUCTS DIVISION

MODEL: **DM-0832-07**

8 X 32 DOT MATRIX (5 X 7), ALPHA NUMERIC, GAS-PLASMA DISPLAY

The DM-0832-07 is a dc-plasma subsystem with character fields of 8 lines of 32 characters. The use of plasma technology provides a bright (65 fL typical) neon-orange display, with a wide 110° off axis legibility. Using a 5x7 matrix of dots forms the display s̓ 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-0832-07 includes high voltage anode and cathode drivers. The subsystem is operated from +5 VDC and +185 VDC power supplies. Also included is a microprocessor and its supporting memory, control the display refresh and user input functions. Character and cursor address data are entered into the display module via a unidirectional eight-bit parallel interface bus.

SPECIFICATIONS
Absolute Maximum Ratings

PARAMETER	SYM	MIN	MAX	UNITS
Supply Voltage	V_{CC}	-	+7.0	Volts
High Level Input Voltage	V_{IH}	-	V_{CC}	Volts
Low Level Input Voltage	V_{IL}	0	-	Volts
Vibration (Sine) (10 –55 Hz)		-	2	G
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
High Voltage Supply	V+	175	180	185	Volts
High Voltage Supply Current	I+			115	mA
Logic Supply Voltage	Vcc	4.5	5.0	6.0	Volts
Logic Supply Current	Icc	-	0.85	1.0	Amps
High Level Input Voltage	V_{IH}	3.5	-	V_{CC}	VDC
Low Level Input Voltage	V_{IL}	0	-	0.8	VDC
High Level Output Voltage	V_{OH}	4.4	-	V_{CC}	VDC
Low Level Output Voltage	V_{OL}	-	-	0.33	VDC

Environmental Characteristics

Operating Temperature	-5 to 55 ^{o}C
Storage Temperature	-40 to +70 ^{o}C
Operating Relative Humidity	10 to 90% non-condensing

J1- Power Connector

Pin Number	Function
1	+185 VDC
2	GND
3	GND
4	+5 VDC

J2 - Data Connector

Pin Number	Function	Pin Number	Function
1	D0	9	D4
2	N.C.	10	CUR. ON/OFF
3	D1	11	D5
4	SELF TEXT	12	RESET
5	D2	13	D6
6	GND	14	WR
7	D3	15	D7
8	BUSY	16	CUR. LD.

Outline and Mounting Drawing:

SPECIFICATIONS ARE FOR REFERENCE ONLY

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