

CU20025ECPB-U1J

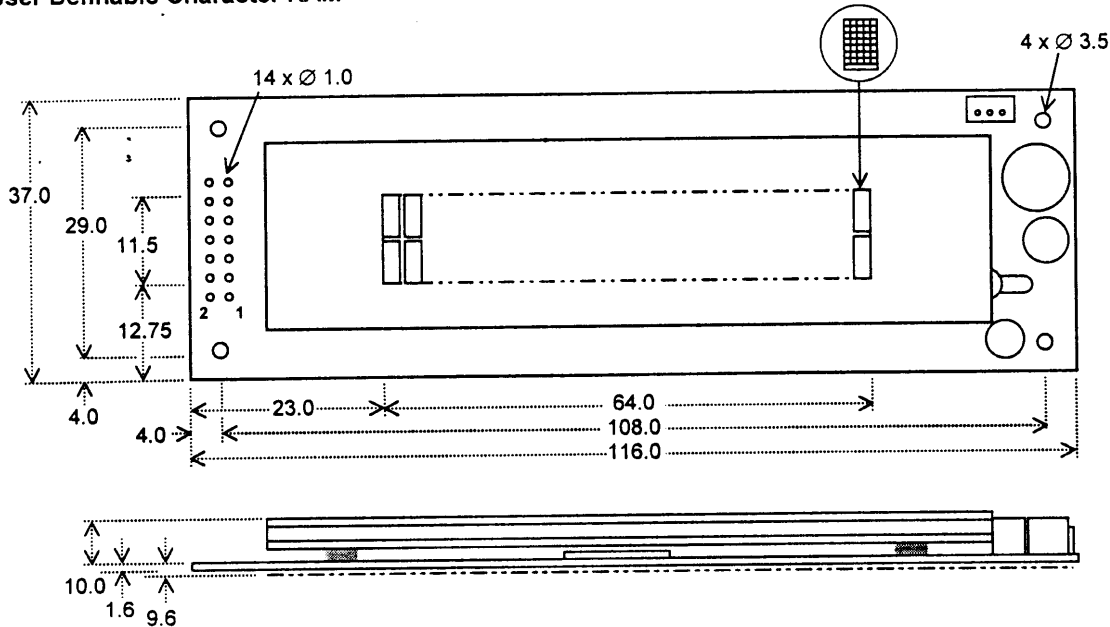
Vacuum Fluorescent Display Module

- 2 Lines of 20 Characters 5mm High
- LCD Compatible Design
- Operating Temp -20°C to +70°C
- Single 5V Supply with Power Down
- High Brightness Blue Green Display
- Selectable 4/8 bit M68/i80 Interface
- ASCII + Extended Character Font
- 8 User Definable Character RAM

The module includes the VFD glass, driver and micro-controller ICs with refresh RAM, character generator and interface logic. The high speed 8 bit parallel interface is 5V TTL/CMOS compatible suitable for connection to a host CPU bus.

The interface bus can be defined as 68 or 80 series CPU by a solder link on the module.

882-951



Dimensions in mm

ELECTRICAL SPECIFICATION

Parameter	Symbol	Value	Condition
Power Supply Voltage	Vcc	5.0VDC +/- 5%	GND=0V
Power Supply Current	Icc	130 mADC	Typ.
Logic High Input	V _{IH}	2.0VDC min.	Vcc=5V
Logic Low Input	V _{IL}	0.8VDC max.	Vcc=5V
Logic High Output	V _{OH}	4.6VDC min.	Vcc=5V
Logic Low Output	V _{OL}	0.4VDC max.	Vcc=5V

Optical filters can provide violet, red, yellow, blue and green output. The power on rise time should be less than 50ms. The inrush current at power on can be 2 x Icc

OPTICAL CHARACTERISTICS

Character Size/Pitch (XxY mm)	2.4 x 4.7/3.6 x 6.1
Dot Size/Pitch (XxY mm)	0.4 x 0.5/0.5 x 0.7
Luminance	700 cd/m ² (200 fL) Typ.
Colour of Illumination	Blue-Green

ENVIRONMENTAL SPECIFICATION

Parameter	Value
Operating Temperature	-20°C to +70°C
Storage Temperature	-40°C to +85°C
Operating Humidity	20 to 80% RH @ 25°C

SOFTWARE COMMANDS

Instruction	RS	D0-D7
Clear Display	L	01H
Return Home	L	02H
Entry Mode Set	L	04H-07H
Display ON/OFF	L	08H-0FH
Cursor/Display Shift	L	10H-1CH
Function Set	L	30H-3CH
Brightness Set	H	00H-03H
Set CG RAM Addr.	L	40H-7FH
Set DD Cursor Addr.	L	80H-FFH
Read BUSY/Addr.	L	00H-FFH
Write Data to RAM	H	00H-FFH
Read Data from RAM	H	00H-FFH

TIMING

Set Up to Enable	100ns min
Enable Pulse Width	300ns min
Hold after Enable	10ns min

Detailed specification, software commands and interface timing are available on request.

CHARACTER FONT

	00	10	20	30	40	50	60	70	80	90	A0	B0	C0	D0	E0	F0
00																
01																
02																
03																
04																
05																
06																
07																
08																
09																
0A																
0B																
0C																
0D																
0E																
0F																

PIN CONNECTION

Pin	Sig	Pin	Sig
1	GND	2	Vcc
3	(FNC)	4	RS
5	R/W #	6	E #
7	D0	8	D1
9	D2	10	D3
11	D4	12	D5
13	D6	14	D7

When jumper link JP2 is soldered, these inputs change to 80 series CPU control lines. Pin 5 = /WR and Pin 6 = /RD

Pin 3 (Fnc) Input

This is normally open circuit. If pads JP1.1 and JP1.2 are linked. Pin 3 = Hardware Reset.

CONTACT

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Subject to change without notice.