

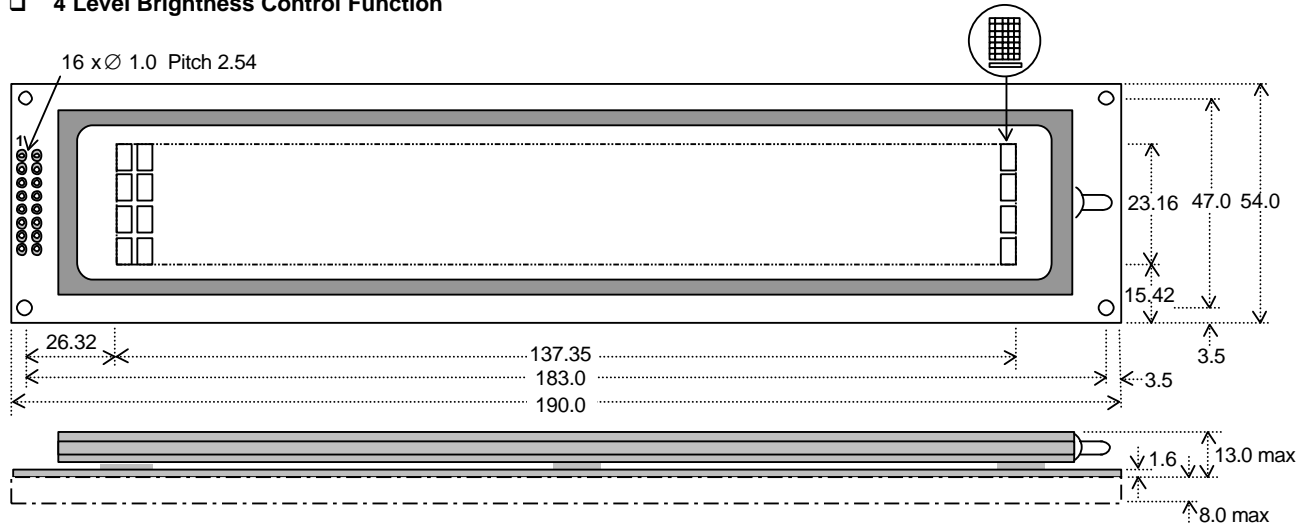
5X7 Dot Character VFD Module

CU40045SCP-B-W1J

- ❑ 4 X 40 Characters 5mm High
- ❑ LCD Compatible Design
- ❑ Wide Operating Temp -40° C to +85° C
- ❑ Single 5V Supply with Power Save Mode
- ❑ High Brightness Blue Green Display
- ❑ Selectable 4/8 bit M68 Interface
- ❑ ASCII + Extended Character Font
- ❑ 8 User Definable Character RAM
- ❑ 4 Level Brightness Control Function

The module includes the Vacuum Fluorescent Display glass, driver and micro-controller ICs with refresh RAM, character generator and interface logic.

The high speed 8 bit parallel interface is 5V CMOS compatible suitable for connection to a host CPU bus. Brightness control and power save functions are provided. Please call for a full data sheet.



Dimensions in mm & subject to tolerances. Mounting holes 3.5mm dia.

ELECTRICAL SPECIFICATION

Parameter	Symbol	Value	Condition
Power Supply Voltage	V _{cc}	5.0VDC +/- 5%	GND=0V
Power Supply Current	I _{cc}	520mADC typ.	V _{cc} =5V
Logic High Input	V _{IH}	V _{ss} +2.2VDC min.	V _{cc} =5V
Logic Low Input	V _{IL}	V _{ss} +0.6VDC max.	V _{cc} =5V
Logic High Output	V _{OH}	V _{cc} -0.5VDC min.	I _{OH} = -1.6mA
Logic Low Output	V _{OL}	V _{ss} +0.4VDC max.	I _{OL} = 1.6mA

The power on rise time should be less than 50ms. The inrush current at power on can be 2 x I_{cc}. The I_{cc} current is 10mA maximum while in power save mode.

OPTICAL and ENVIRONMENTAL SPECIFICATIONS

Parameter	Value
Character Size/Pitch (XxY mm)	2.07 x 4.89/3.47 x 5.09
Dot Size/Pitch (XxY mm)	0.29 x 0.48/0.44 x 0.63
Luminance	700 cd/m ² (204 fL) Typ.
Colour of Illumination	Green (Filter for more colours)
Operating Temperature	-40°C to +85°C
Storage Temperature	-50°C to +85°C
Operating Humidity (non condensing)	20 to 80% RH @ 25°C

SOFTWARE COMMANDS

Instruction	R/W	RS	D0-D7
Clear Display	L	L	01H
Cursor Return Home	L	L	02H-03H
Entry Mode Set	L	L	04H-07H
Display ON/OFF	L	L	08H-0FH
Cursor/Display Shift	L	L	10H-1FH
Function Set	L	L	20H-3FH
Brightness Set	L	H	00H-03H
Set CG RAM Addr.	L	L	40H-7FH
Set DD RAM Addr.	L	L	80H-E7H
Read BUSY/Addr.	H	L	00H-FFH
Write Data to RAM	L	H	00H-FFH
Read Data from RAM	H	H	00H-FFH

PIN CONNECTIONS

Pin	Sig	Pin	Sig
1	D7	2	D6
3	D5	4	D4
5	D3	6	D2
7	D1	8	D0
9	E1	10	R/W
11	RS	12	NC
13	GND	14	V _{cc}
15	E2	16	NC

TIMING PARAMETERS (min)

(E)nable Cycle Time	666ns
(E)nable Pulse Width	300ns
Hold after (E)nable	10ns

CHARACTER FONT

H _E X	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																

JUMPER LINKS

If pads JP1.2 and JP1.3 are linked for no longer than 10us module will be reset. If pads JP1.1 and JP1.2 are linked Pin 12 of CN1 = /Reset.

CONTACT

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