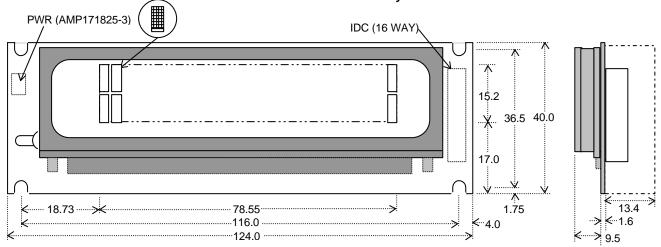
5X7 Dot Character VFD Module

CU20025SCPB-T20A

- 2 Lines of 20 Characters 5mm High
- **High Speed Parallel/Serial Interface**
- Operating Temp -10°C to +65°C
- Single 5V Supply
- **High Brightness Blue Green Display**
- **ASCII, Katakana & Extended Character Font**
- 8 User Definable Character RAM

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. The asynchronous serial interface accepts baud rates up to 19,200 with or without parity. Two character font tables can be hardware or software selected. User defined characters and many control commands are available.



Dimensions in mm & subject to tolerances

Additional Katakana Font

International Font

ELECTRICAL SPECIFICATION

Parameter	Symbol	Value	Condition
Power Supply Voltage	Vcc	5.0VDC +/- 5%	GND=0V
Power Supply Current	lcc	320mADC typ.	Vcc=5V
Logic High Input	ViH	2.0VDC min.	Vcc=5V
Logic Low Input	VIL	0.8VDC max.	Vcc=5V
Logic High Output	Vон	2.4VDC min.	loh = -2.0 mA
Logic Low Output	Vol	0.5VDC max.	lol = 2.0 mA

The power on rise time should be less than 50ms. The inrush current at power on can be 2 x lcc.

OPTICAL and ENVIRONMENTAL SPECIFICATIONS

Parameter	Value
Character Size/Pitch (XxY mm)	2.55 x 4.65/4.0 x 9.6
Dot Size/Pitch (XxY mm)	0.35 x 0.45/0.55 x 0.7
Luminance	700 cd/m ² (204 fL) Typ.
Colour of Illumination	Blue-Green (Filter for colours)
Operating Temperature	-10°C to +65°C
Storage Temperature	-40°C to +85°C
Operating Humidity (non condensing)	20 to 80% RH @ 25°C

SOFTWARE COMMANDS

Instruction	D0-D7	Instruction	D0-D7
Back Space	08H	International Font	18H
Horizontal Tab	09H	Katakana Font	19H
Line Feed	0AH	Escape	1BH
Form Feed	0CH	➣ Send User Font	+43H
Carriage Return	0DH	➤ Position cursor	+48H
Clear Display	0EH	➤ Software Reset	+49H
Increment Write Mode	11H	➤ Luminance	+4CH
Vertical Scroll Mode	12H	➤ Flickerless Write	+53H
Underline Cursor On	14H	➤ Cursor Blink Speed	+54H
5x7 Block Cursor On	15H	Character Data	20H+
Cursor Off	16H	User Character Data	00H+

TIMING PARAMETERS (min)

Data Set Up To Write	100ns
Write Pulse Width	160ns
Hold After Write	10ns

Subject to change without notice. Detailed specification on request. IUK Doc Ref:0831 Iss:5 2OCT00

CHARACTER FONTS 00 10 20 30 40 50 60 70 80 90 A0 B0 C0 D0 E0 F0 80 90 A0 B0 C0 D0 E0 F0

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IDC DATA CONNECTOR

	Pin	Sig	Pin	Sig
	1	D7	9	WR
ı	2	D6	10	cs
ı	3	D5	11	SIN/TEST
ı	4	D4	12	BUSY
ı	5	D3	13	GND (0V)
ı	6	D2	14	GND (0V)
ı	7	D1	15	Vcc(5V)
ı	8	D0	16	Vcc(5V)
•				

3 PIN POWER CONNECTOR

Pin	Sig
1	Vcc(5V)
2	SIN/TEST
3	GND (0V)

Mates with AMP171822-3

PCB JUMPERS (O)PEN (L)INK

TOD COM LING (O)FLIV (L)IIVK										
Baud	J2	7	1 J0							
19200	0)	0						
9600	0)	L						
4800	0		_	0						
2400	0		_	L						
1200	L)	0						
Parity	J4			J3						
EVEN	0		0							
ODD	0		L							
NONE	L		L/O							

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