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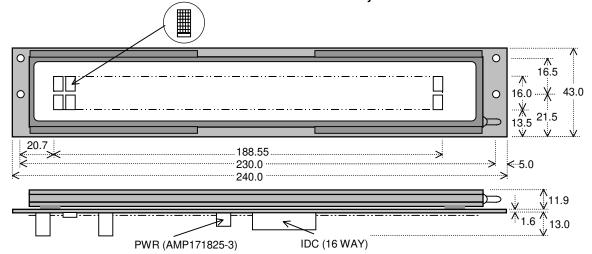


# **5X7 Dot Character VFD Module**

# CU40026SCPB-T20A

- 2 Lines of 40 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**
- 2 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. Mounting holes 3.5mm dia.

International Font

Additional Katakana Font

### **ELECTRICAL SPECIFICATION**

Parameter	Symbol	Value	Condition							
Power Supply Voltage	Vcc	5.0VDC +/- 5%	GND=0V							
Power Supply Current	Icc	700mADC 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.	Iон = -2.0mA							
Logic Low Output	Vol	0.5VDC max.	IoL =2.0mA							

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)	3.3 x 5.05/4.75 x 9.95
Dot Size/Pitch (XxY mm)	0.5 x 0.55/0.7 x 0.75
Luminance	700 cd/m <sup>2</sup> (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:0832 Iss:5 3OCT00

#### CHARACTER FONTS 00 10 20 30 40 50 60 70 80 90 00 80 70 00 50 50 80 90 00 80 70 00 50 50

	00	10	20	30	40	50	60	70	80	90	AO	BO	CO	DO	EO	F0	80	90	A0	BO	CO	DO	EO	FO
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# **IDC DATA CONNECTOR**

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

Baud	J2	7	1 J0			
19200	0		)	0		
9600	0		)	L		
4800	0	L	_	0		
2400	0	L	-	L		
1200	L		)	0		
Parity	J4		J3			
EVEN	0		0			
ODD	0		L			
NONE	L		L/O			

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