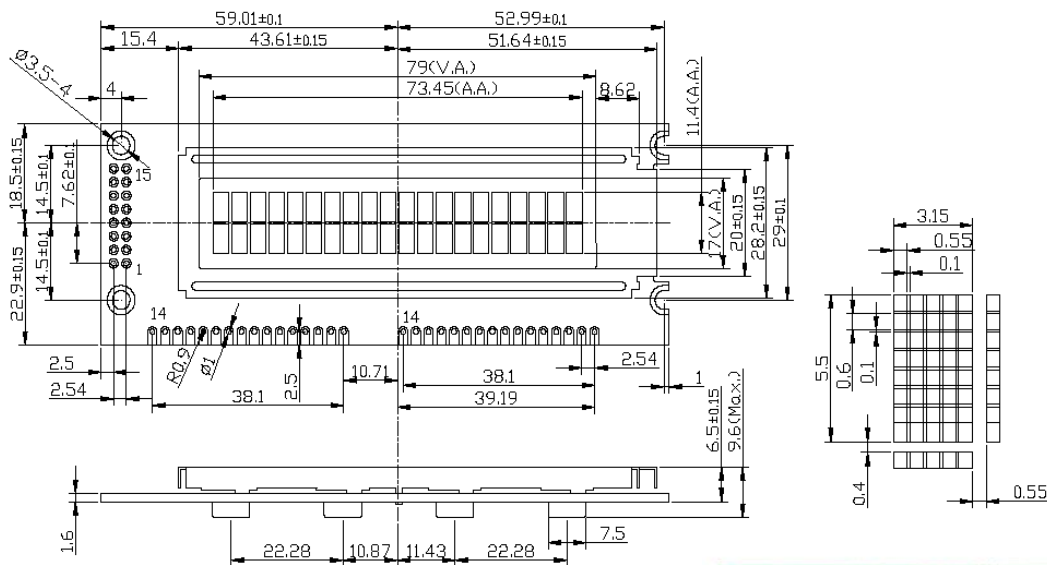




Character 16x2 **WP2002A**

Dimension drawing



Feature

- 1.2 lines of 20 character of 5x8(dots)
- 2.controller is compatible with HD44780
- 3.4-bits or 8-bit MPU interface
- 4.High speed MPU interface:2MHZ(VDD=5V)
- 5.80x8 bit Display RAM (80 characters max)

Pin NO.	Symbol	Function
1	Vss	GND
2	Vdd	Supply Voltage for logic
3	VBT	Operating Voltage for LCD Brightness Adj
4	RS	H:Data L:Inctruction
5	R/W	Read / Write signal
6	E	chip enable signal
7	DB0	Data bit 0
8	DB1	Data bit 1
9	DB2	Data bit 2
10	DB3	Data bit 3
11	DB4	Data bit 4
12	DB5	Data bit 5
13	DB6	Data bit 6
14	DB7	Data bit 7
15	NC	No connection
16	NC	No connection

Mechanical Data

Item	Standard Value	Unit
Module Dimension	113.0x41.4x9.0(Max)	mm
Viewing Area	79.0x17.0	mm
Mounting hole	108.09x29.0	mm
Character Size	3.15x5.50	mm

Absolute Maximum Rating

Symbol	Parameter	Min	Typ	Max	Unit
VDD	Supply voliage for Logic	4.5	5.0	5.5	V
Topr	Operating temperature	-20	---	50	°C
Tatg	Storage temperature	-30	---	70	°C
Vbt	Brightness control voltage	2	3	5	V
Tsolder	Soldering Temperature	260°C for 5 seconds			
Pd	Moduid power consumption @Vbt=3V (Note 1)	50	80	130	mW
Ps	Power saving mode@Vbt=2.5V (Note2)	45	30	75	mW

Item	Operating		Storage	
	Min	Mar	Min	Max
Ambient Temperature	-20°C	50°C	30°C	70°C
Humidity	45°C 85%RH		45°C 85%RH	
Corrosive gas	Not Acceptable		Not Acceptable	

Electronical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Power supply voliage	VDD		4.5		5.5	V
Brightness control voltage	VBT		2	3	5	V
Power supply current	Icc	VDD=5V(Uligital only)		0.35	0.6	mA
High level input voltage	nh		0.7VDD		VDD	V
Low level input voltage	Vil		-0.3		0.55	V
Leakage current	Ii		-1		1	mA

Display Character Address Code

Display position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DD RAM Address	00	01																		
DD RAM Address	40	41																		