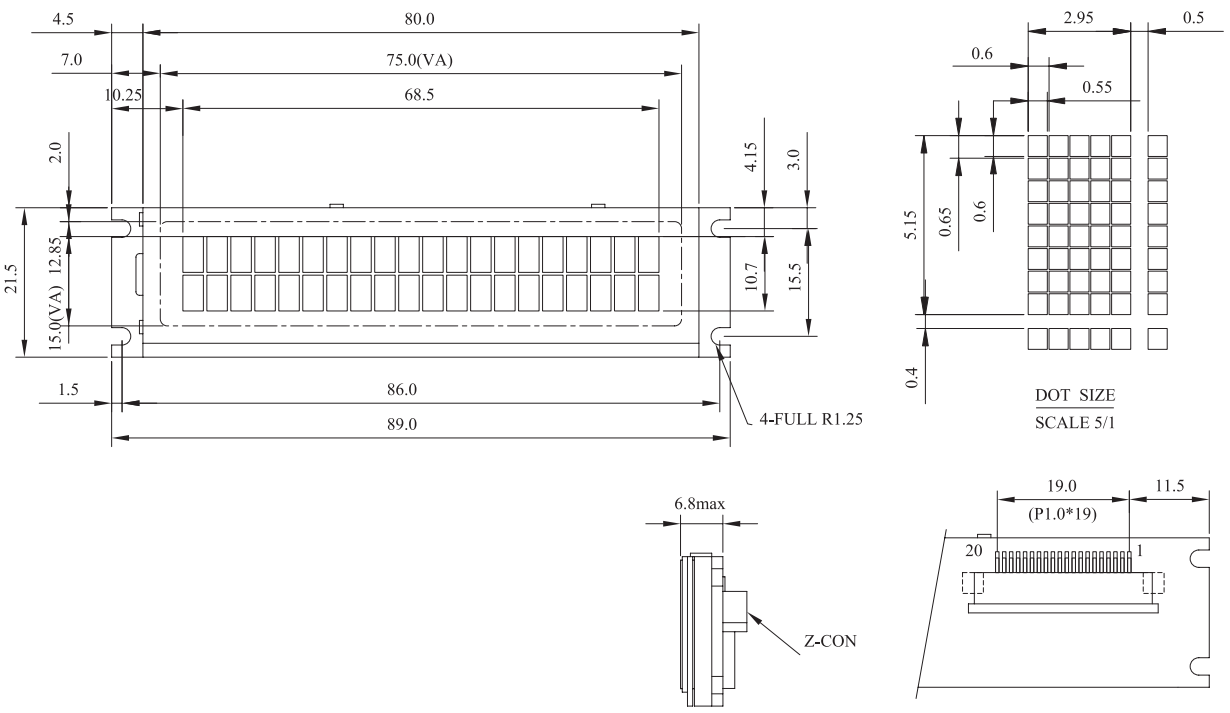
WH2002D Character 20x2

Dimension drawing



Character type

Feature

1.5x8 dots include cursor
2.Built-in controller (ST 7066 or Equivalent)
3.+5V power supply (Also available for +3V)
4.1/16 duty cycle
5.LED can be driven by Pin17, Pin18
6.N.V option for +3V power supply

Pin NO.	Symbol	Function
1	NC	No Connection
2	NC	No connection
3	Vss	GND
4	Vdd	+3 or +5V
5	Vo	contrast Adjustment
6	RS	H/L Register select signal
7	R/W	Data Read/write
8	E	H→L Enable signal
9	DB0	Data bus 0
10	DB1	Data bus 1
11	DB2	Data bus 2
12	DB3	Data bus 3
13	DB4	Data bus 4
14	DB5	Data bus 5
15	DB6	Data bus 6
16	DB7	Data bus 7
17	VLED+	Power supply for LED+
18	VLED-	Power supply for LED-
19	Vee	Negative voltage output
20	NC	No connection

Mechanical Data

Item	Standard Value	Unit
Module Dimension	89.0x21.5	mm
Viewing Area	75.0x15.0	mm
Mounting hole	86.0x15.5	mm
Dot Pitch	2.95x5.15	mm

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power Supply	VDD-VSS	-0.3	---	6.7	V
Input Voltage	VI	-0.3	---	VDD	V

Note：VSS=0 Volt, VDD=5.0 Volt.

Electronical Characteristics

Item	Symbo	Condition	Standard Value			Unit
			min.	typ.	max.	
Input Voltage	VDD	VDD=+5V	4.75	---	5.25	V
Supply Current	IDD	VDD=+5V	---	1.2	---	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	-20°C	---	---	5.2	V
		0°C	---	---	4.5	
		25°C	---	4.2	---	
		50°C	3.8	---	---	
		70°C	3.5	---	---	

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														0F				13
DD RAM Address	40	41														4F				53