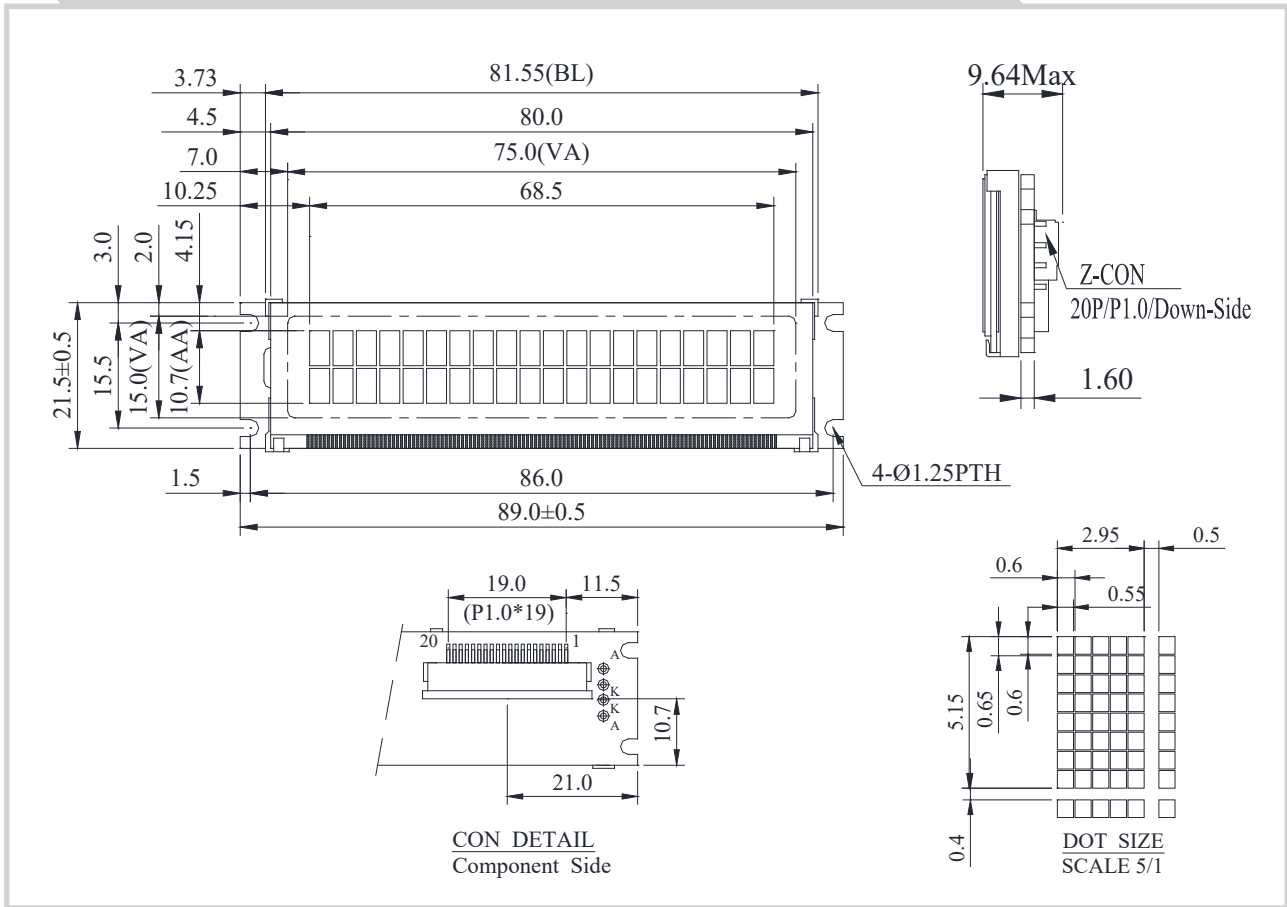


# TH2002D Character 20x2



## Feature

1. 1.5x8 dots includes cursor
2. Built-in controller (ST7066 or Equivalent)
3. 3.5V power supply ( Also available for 3V)
4. N.V, optional for 3V power supply
5. 1/16 duty cycle
6. LED can be driven by PIN17, PIN18
7. Interface : 6800, option SPI/I2C (RW1063 IC)

Pin No.	Symbol	Description
1	NC	No connection
2	NC	No connection
3	V <sub>SS</sub>	Ground
4	V <sub>DD</sub>	Power supply for logic
5	V <sub>O</sub>	Contrast Adjustment
6	RS	Data/ Instruction select signal
7	R/W	Read/Write select signal
8	E	Enable signal
9	DB0	Data bus line
10	DB1	Data bus line
11	DB2	Data bus line
12	DB3	Data bus line
13	DB4	Data bus line
14	DB5	Data bus line
15	DB6	Data bus line
16	DB7	Data bus line
17	V <sub>LED+</sub>	Power supply for B/L +
18	V <sub>LED-</sub>	Power supply for B/L -
19	NC	No connection
20	NC	No connection

## Mechanical Data

Item	Standard Value	Unit
Module Dimension	89.0 x 21.5	mm
Viewing Area	75.0 x 15.0	mm
Mounting Hole	86.0 x 15.5	mm
Character Size	2.95 x 5.15	mm

## Electrical Characteristics

Item	Symbol	Standard Value	Unit
		typ.	
Input Voltage	VDD	3/5	V
Recommended LCD Driving Voltage for Normal Temp. Version module @25°C	VDD-VO	4.20	V

## 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