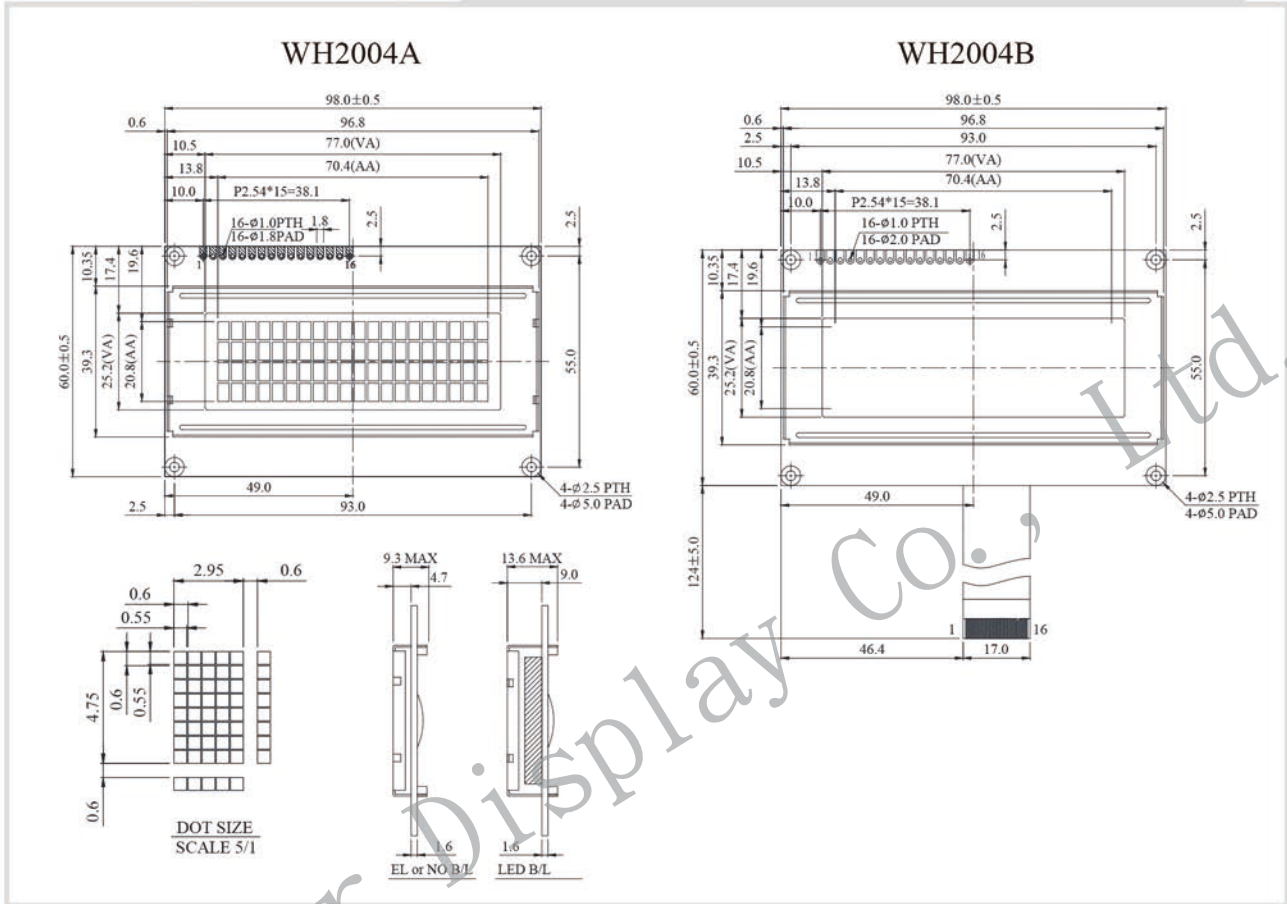


WH2004A/B Character 20x4



Feature

- 1. 5x8 dots includes cursor
- 2. Built-in controller (ST7066 or Equivalent)
- 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 PIN1, PIN2, PIN15, PIN16 or A and K
- 7. Interface : 6800, SPI, I2C
- 8. WH2004B : FFC connector
- 9. WH2004F : 7 colors LED option

Mechanical Data

Item	Standard Value	Unit
Module Dimension	98.0 x 60.0	mm
Viewing Area	77.0 x 25.2	mm
Mounting Hole	93.0 x 55.0	mm
Character Size	2.95 x 4.75	mm

WH2004A

Pin No.	Symbol	Description
1	V _{SS}	Ground
2	V _{DD}	Power supply for logic
3	V _O	Contrast Adjustment
4	RS	Data/ Instruction select signal
5	R/W	Read/Write select signal
6	E	Enable signal
7	DB0	Data bus line
8	DB1	Data bus line
9	DB2	Data bus line
10	DB3	Data bus line
11	DB4	Data bus line
12	DB5	Data bus line
13	DB6	Data bus line
14	DB7	Data bus line
15	A	Power supply for B/L +
16	K	Power supply for B/L -

WH2004B

Pin No.	Symbol	Description
1	V _{SS}	Ground
2	V _{DD}	Power supply for logic
3	V _O	Contrast Adjustment
4	RS	Data/ Instruction select signal
5	R/W	Read/Write select signal
6	E	Enable signal
7	DB0	Data bus line
8	DB1	Data bus line
9	DB2	Data bus line
10	DB3	Data bus line
11	DB4	Data bus line
12	DB5	Data bus line
13	DB6	Data bus line
14	DB7	Data bus line
15	A	Power supply for B/L +
16	K	Power supply for B/L -

Electrical Characteristics

Item	Symbol	Standard Value typ.	Unit
Input Voltage	VDD	3/5	V
Recommended LCD Driving Voltage for Normal Temp. Version module @25°C	VDD-VO	4.50	V

Display Character Address Code

Display position	1	2	3	4	5	6	7	8	9	10	11	12	13	---	20
DD RAM Address	00	01	02												13
DD RAM Address	40	41	42												53
DD RAM Address	14	15	16												27
DD RAM Address	54	55	56												67