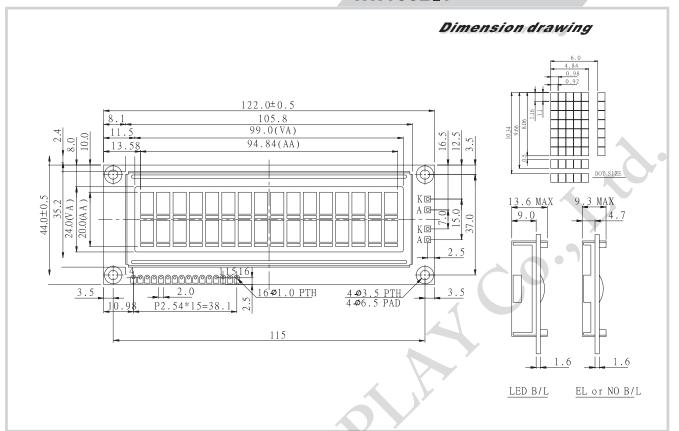## WH1602L1 Character 16x2

Dimension drawing

LED B/L   EL or NO B/L

Feature

1.5x8 dots includes cursor

2.Built-in controller (ST 7066 or Equivalent

3.+5 power supply (Also available for +3V)

4.1/16 duty cycle

5.LED can be driven by pin1, pin2, pin15, pin16, or A and K

6.Optional:smaller character size (2.95x4.35mm)

7. WG16032D: Chinese version

Pin NO.	Symbol	Function
1	Vss	GND
2	Vdd	+3V or + 5V
3	Vo	Contrast Adjustment
4	RS	H/L Register select signal
5	R/W	H/L Read / write signal
6	E	H→L Enable signal
7	DB0	H/L Data bus line
8	DB1	H/L Data bus line
9	DB2	H/L Data bus line
10	DB3	H/L Data bus line
11	DB4	H/L Data bus line
12	DB5	H/L Data bus line
13	DB6	H/L Data bus line
14	DB7	H/L Data bus line
15	A/Vee	+4.2V for LED(RA=0Ω)/Negative Voltage output
16	K	Power supply for B/L (0V)

Mechanical Data

Item	Standard Value	Unit
Module Dimension	122.0x44.0	mm
Viewing Area	99.0x24.0	mm
Mounting hole	115 x 37.0	mm
Character Size	4.84x9.66	mm

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power Supply	VDD-VSS	-0.3	---	7.0	V
Input Voltage	VI	-0.3	---	VDD	V

Note : VSS=0 Volt, VDD=5.0 Volt.

Electronical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			min.	typ.	max.	
Input Voltage	VDD	VDD=+5V	4.7	5.0	5.3	V
Supply Current	IDD	VDD=5V	---	1.6	1.5	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	4.2	---	
		50°C	3.8	---	---	
		70°C	3.5	---	---	
LED Forward Voltage	VF	25°C	---	4.2	4.6	V
LED Forward Current	IF	25°C Array	---	260	520	
EL Power Supply Current	IEL	Vel=110VAC;400Hz	---	---	5.0	mA

Display Character Address Code :

Display position

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
DD RAM Address	00	01														0F
DD RAM Address	40	41														4F