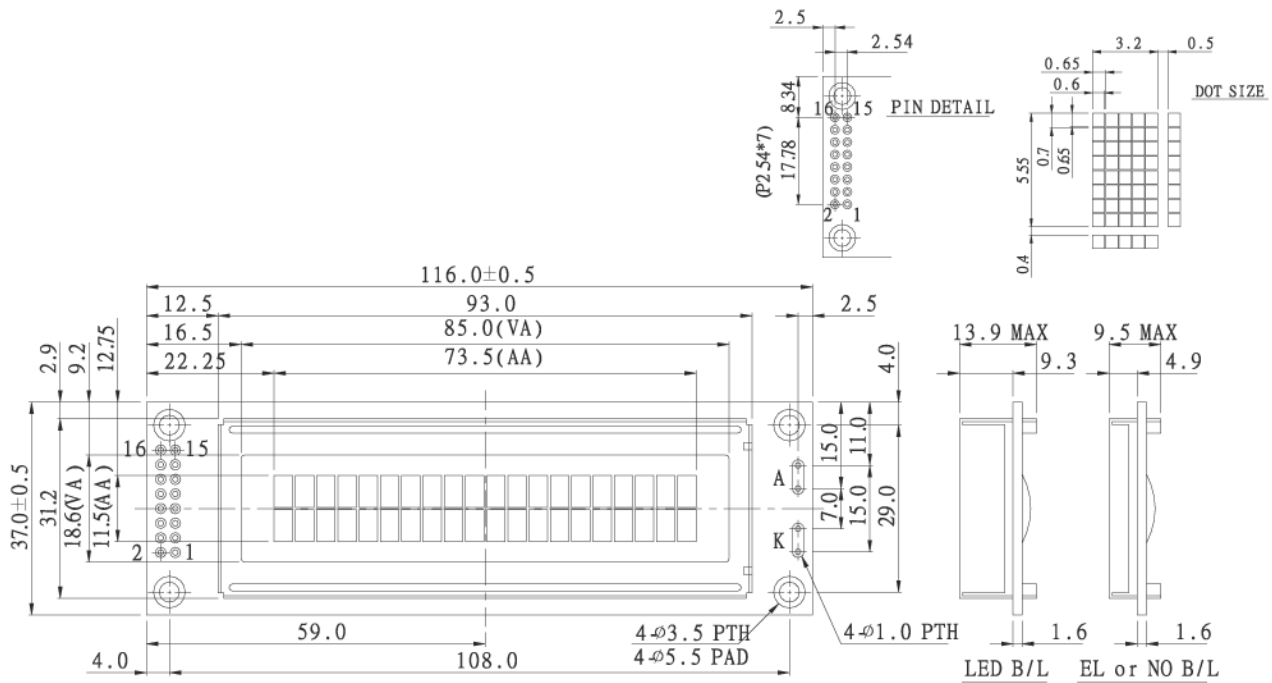


Character 20x2 **WH2002A**

Dimension drawing



Feature

1. 5x8 dots includes cursor
2. Built-in controller (KS 0066 or E Quivalent)
3. +5V 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. N.V. optional for +3V power supply

Mechanical Data

Item	Standard Value	Unit
Module Dimension	116.0x37.0	mm
Viewing Area	85.0x18.6	mm
Mounting hole	108.0x29.0	mm
Character Size	3.2x5.55	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
		VDD=+3V	2.7	3.0	5.3	V
Supply Current	IDD	VDD=5V	---	1.0	1.2	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	-20°C	5.0	5.1	5.7	V
		0°C	4.6	4.8	5.2	
		25°C	4.1	4.5	4.7	
		50°C	3.9	4.2	4.5	
		70°C	3.7	3.9	4.3	
LED Forward Voltage	VF	25°C	---	4.2	4.6	V
LED Forward Current	IF	25°C	---	210	420	mA
EL Power Supply Current	IEL	Vel=110VAC;400Hz	---	---	5.0	mA

Display Character Address Code

Display position

DD RAM Address	1	2	3	4	5	6	7	8	9	10	11	12	13	---	---	20
DD RAM Address	00	01														13
DD RAM Address	40	41														53

Character type