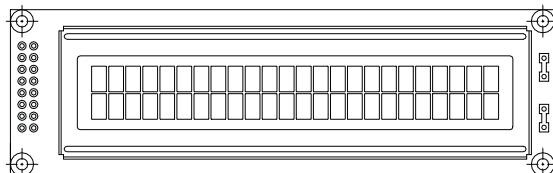


## 24 x 2 Character LCD



### FEATURES

- 5 x 8 dots with cursor
- Built-in controller (KS 0066 or Equivalent)
- + 5V power supply (Also available for + 3V)
- 1/16 duty cycle
- B/L to be driven by pin 1, pin 2 or pin 15, pin 16 or A and K (LED)
- N.V. optional for + 3V power supply

<b>MECHANICAL DATA</b>		
ITEM	STANDARD VALUE	UNIT
Module Dimension	118.0 x 36.0	mm
Viewing Area	94.5 x 16.0	mm
Dot Size	0.6 x 0.65	mm
Character Size	3.2 x 5.55	mm

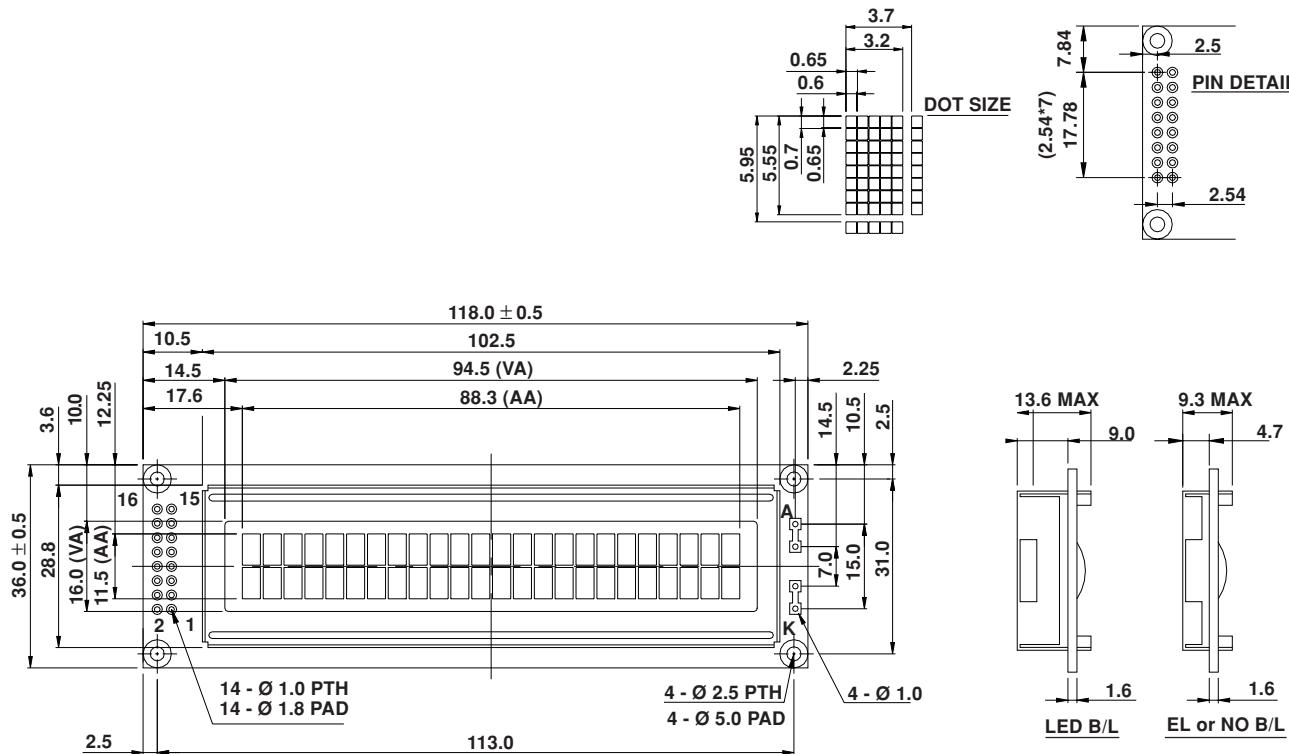
<b>ABSOLUTE MAXIMUM RATING</b>					
ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power Supply	VDD-VSS	- 0.3	—	7.0	V
Input Voltage	VI	- 0.3	—	VDD	V

**NOTE:** VSS = 0 Volt, VDD = 5.0 Volt

<b>ELECTRICAL SPECIFICATIONS</b>						
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	—	0.8	1.1	mA
Recommended LC Driving Voltage for Normal Temp. Version Module	VDD - V0	- 20 °C	5.1	5.3	5.7	V
		0°C	4.6	4.9	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	—	190	380	mA
EL Power Supply Current	IEL	Vel = 110VAC;400Hz	—	—	5.0	mA

<b>DISPLAY CHARACTER ADDRESS CODE:</b>													
Display Position	1	2	3	4	5	6	7	8	9	10	11	12	—
DD RAM Address	00	01											24
DD RAM Address	40	41											17
													57

PIN NUMBER	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	+ 4.2 for LED/Negative Voltage Output
16	K	Power Supply for B/L (0V)

**DIMENSIONS** in millimeters


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