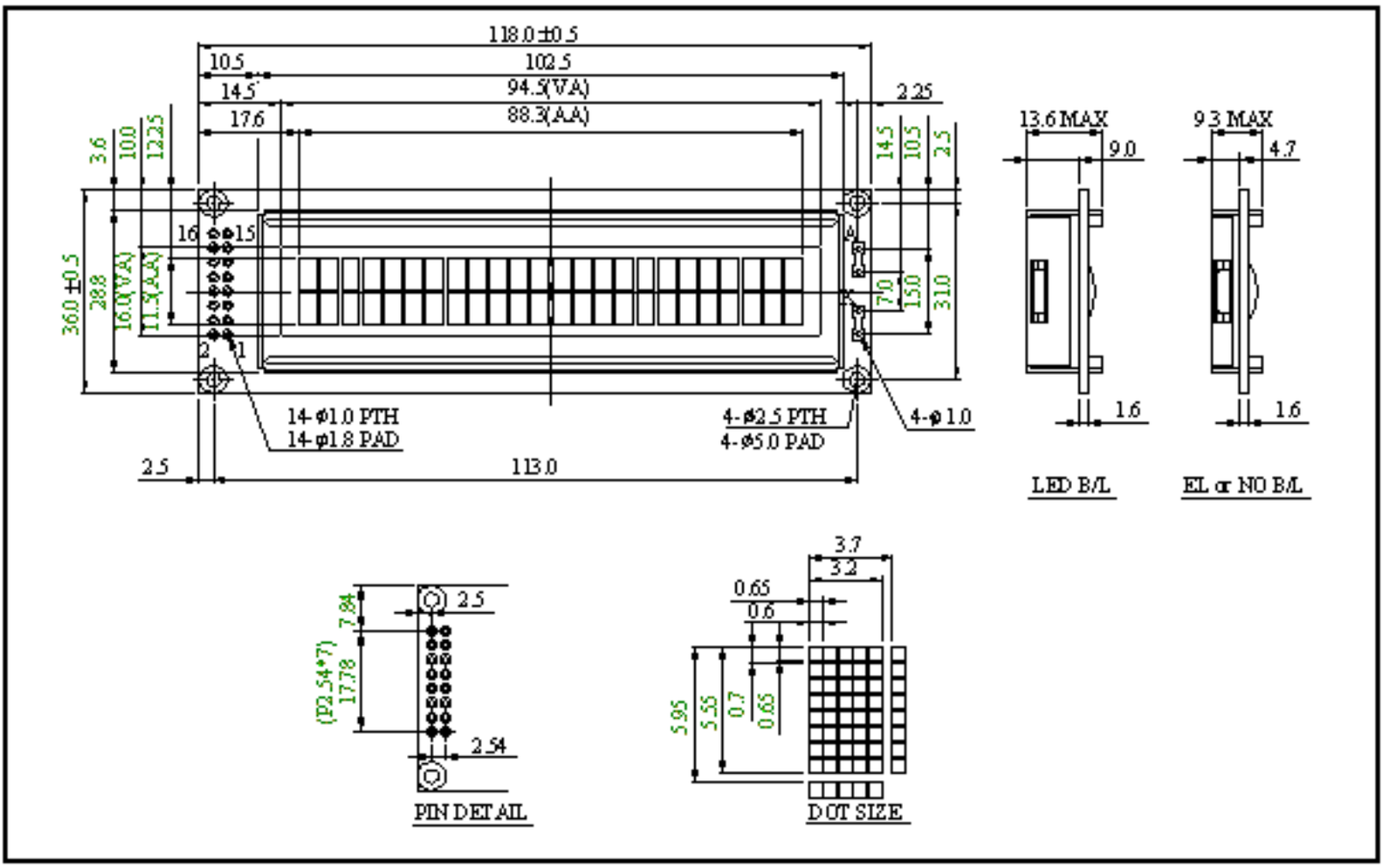

Feature

1.5x8 dots includes cursor
2.Built-in controller (KS 0066 or Equivalent)
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

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/$\overline{W}$	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	118.0 x 36.0	mm
Viewing Area	94.5 x 16.0	mm
Mounting hole	113.0 x 31.0	mm
Character Size	3.2 x 5.55	mm

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power supply	VDD-VSS	-0.3	---	7.0	V
Input Voltage	V1	-0.3	---	VDD	V

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

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	---	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	IEL	Vel=110 VAC;400Hz	---	---	5.0	mA

Display Character Address Code:

Display position	1	2	3	4	5	6	7	8	9	10	11	12	13	---	---	24
DD RAM Address	00	01														17
DD RAM Address	40	41														57