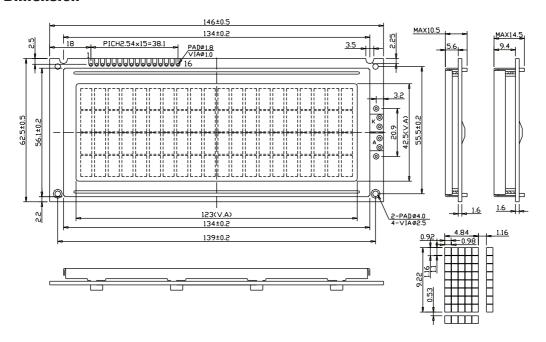## Outline Dimension

Feature

1. *5X8 dots with cursor*
2. *Built-in controller (KS0066U or Equivalent)*
3. *+5V power supply*
4. *1/16 duty cycle*
5. *BKL to be driven by pin15,pin16.*
6. *N.V.optional*

Interface pin connections

PIN NO	Symbol	Function
1	VSS	GND
2	VDD	+5V
3	V0	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	+3.8V for BKL
16	K	Power supply for BKL(0V)

Mechanical Data

Item	Standard	Unit
Module dimension	98.0x60.0X18.6	mm
Viewing area	76.0x26.0	mm
Dot size	0.55x0.55	mm
Character size	2.95x4.75	mm

Absolute Maximum Rating

Item	Symbol	Standard			Unit
		Min	Typ	Max	
Power supply	VDD-VSS	-0.3	--------	5.5	V
Input voltage	VI	-0.3	--------	VDD	V

Electronical characteristics

Item	Symbol	Condition	Standard			Unit
			Min	Typ	Max	
Input voltage	VDD	+5V	4.7	5.0	5.5	V
		+3.3V	2.7	2.0	5.3	V
Supply current	IDD	VDD=5V	------	3.0	3.5	mA
Recommended LCD driving voltage for normal temp version module	VDD-V0	-20ºC	------	------	------	V
		0 ºC	4.7	5.0	5.5	
		25ºC	4.3	4.5	4.7	
		50ºC	4.1	4.3	4.5	
		70ºC	------	-------	------	
LED forward voltage	VF	25ºC	------	3.8	4.0	V
LED forward current	IF	25ºC	------	55	-----	mA
EL power supply current	IEL	VEL=110V AC 400Hz	-----	-------	------	mA

Display character address code:

Display position

	1	2	3	---	---	---	---	---		19	20
DDRAM address	00	01	02	---	---	---	---	---		12H	13H
DDRAM address	40	41	42	---	---	---	---	---		52H	53H
DDRAM address	14	15	16	---	---	---	---	---		26H	27H
DDRAM address	54	55	56	---	---	---	---	---		66H	67H