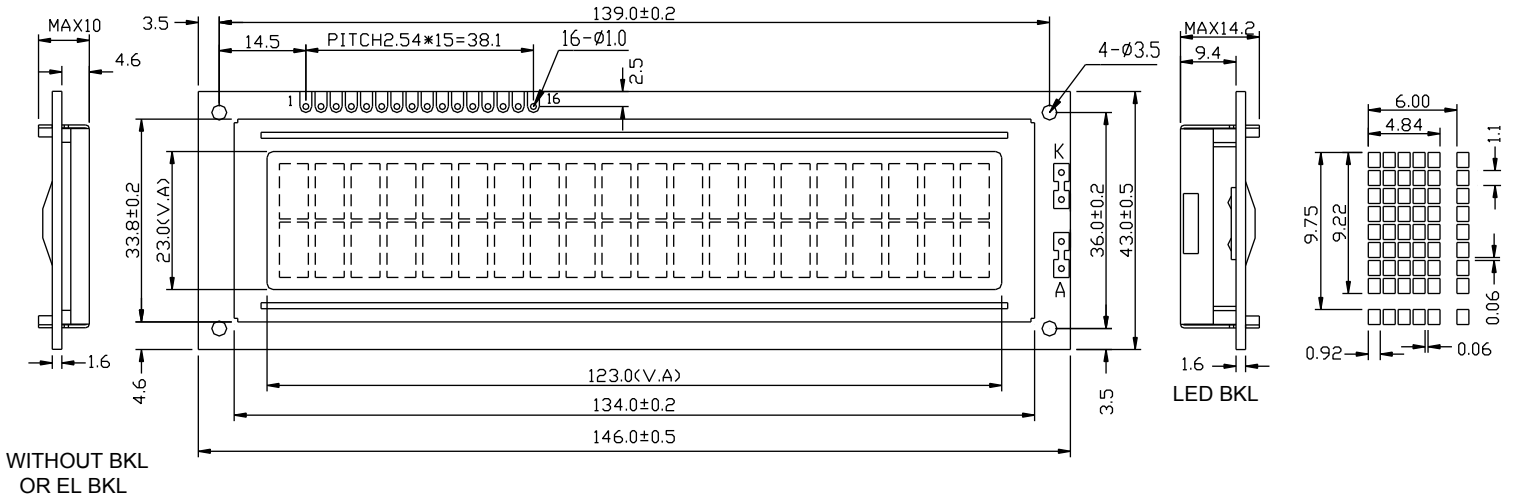




**Outline Dimension**



WITHOUT BKL  
OR EL BKL

**Feature**

1. 5X8 dots with cursor
2. Built-in controller (KS0066U or Equivalent)
3. +5V power supply(Also available for +3.0V)
4. 1/16 duty cycle
5. BKL to be driven by pin1, pin2, or pin15, pin16 or A, K
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	+4.2V for BKL
16	K	Power supply for BKL(0V)

**Mechanical Data**

Item	Standard	Unit
Module dimension	146.0x43.0	mm
Viewing area	123.0x23.0	mm
Dot size	0.92x1.10	mm
Character size	4.84x9.22	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	

**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	3.0	5.3	V
Supply current	I <sub>DD</sub>	VDD=5V	-----	2.5	4	mA
Recommended LCD driving voltage for normal temp version module	VDD-V0	-20°C	-----	5.0	-----	V
		0 °C	4.7	4.8	5.5	
		25°C	4.3	4.5	4.7	
		50°C	4.1	4.4	4.5	
LED forward voltage	V <sub>F</sub>	25°C	-----	4.2	4.6	V
LED forward current	I <sub>F</sub>	25°C	-----	300	-----	mA
EL power supply current	I <sub>EL</sub>	V <sub>EL</sub> =110V AC 400Hz	-----	-----	-----	mA

**Display character address code:**

Display position

1	2	3	4	5	---	---	---	---	18	19	20
00	01	02	---	---	---	---	---	---	11	12	13H
40	41	42	---	---	---	---	---	---	51	52	53H