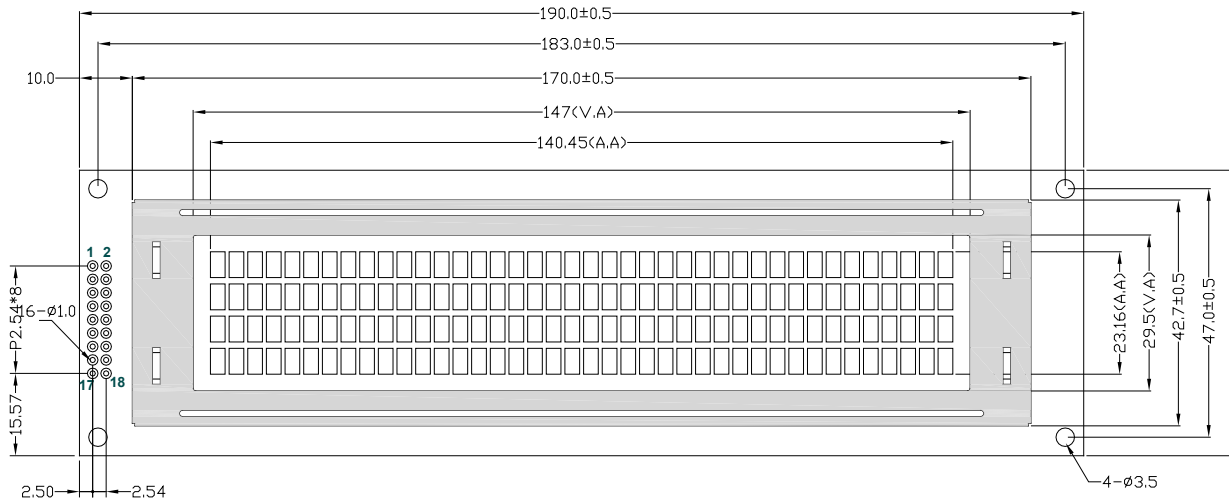


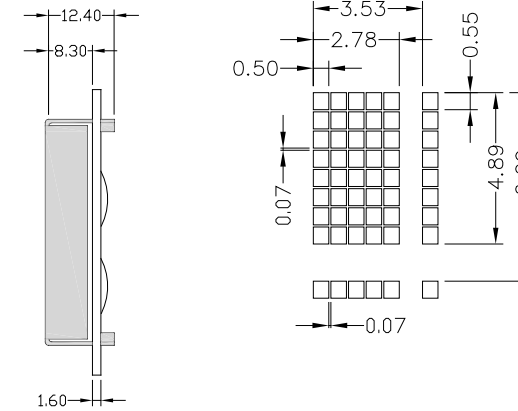
# LCM4004A

## Pin connections

PIN NO	Symbol
1	DB7
2	DB6
3	DB5
4	DB4
5	DB3
6	DB2
7	DB1
8	DB0
9	E1
10	RW
11	RS
12	V0
13	VSS
14	VDD
15	E2
16	NC
17	A
18	K



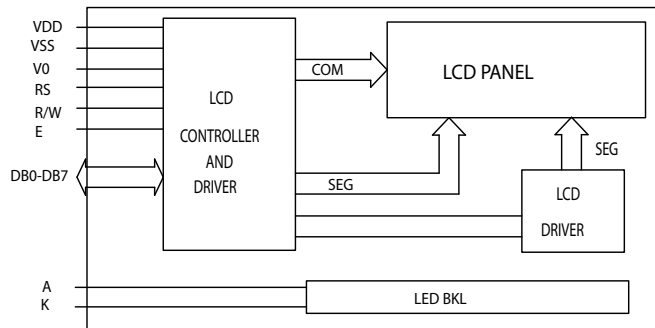
## DOTS DETAIL



## Feature

- 1-line x40 characters display; 5x8 dots with cursor
- Built-in controller (KS0066U or Equivalent)
- +5V power supply(Also available for +3.3V)
- 1/16 duty cycle;1/5bias;
- TN, HTN, STN or FSTN mode
- BKL to be driven by pin1, pin2, or pin15, pin16, or A, K

## Block diagram:



## Display character address code

### Display position

	1	2	3	---	---	---	---	38	39	40
DDRAM address	00	01	02	---	---	---	---	25	26	27H
DDRAM address	40	41	42	---	---	---	---	65	66	67H
	00	01	02	---	---	---	---	25	26	27H
	40	41	42	---	---	---	---	65	66	67H

## Mechanical thickness

LCD module thickness	T1	T2	UNIT
Without or EL backlight	5.4	9.5	mm
With edge LED backlight	---	---	mm
With LED bottom backlight	8.9	13.0	mm

## Mechanical data

Item	Standard	Unit
Module dimension	190.0x54.0	mm
Viewing area	147.0x29.5	mm
Dot size	0.50x0.55	mm
Character size	2.78x4.89	mm

## Absolute Maximum Rating

Item	Symbol	Standard			Unit
		Min	Typ	Max	
Input voltage	VI	-0.3	-----	5.5	V
Power supply	VDD-VSS	-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	3.3	5.3	
Supply current	IDD	VDD=5V	-----	2.5	3	mA
Recommended LCD driving voltage for normal temp version module	VDD-V0	-20°C	4.8	5.0	5.3	
		0 °C	4.6	4.8	5.0	
		25°C	4.3	4.5	4.7	
		50°C	4.2	4.3	4.5	
		70°C	4.1	4.2	4.3	
LED forward voltage	VF	25°C	-----	4.2	4.6	V
LED forward current	IF	25°C	-----	480	-----	mA
EL power supply current	IEL	VEL=110V AC 400Hz	-----	-----	-----	mA