LCD / LCM SPECIFICATION

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RC2004C

General Specification

The features is described as follow:

- Module Dimension: 146.0 x 62.5 x 13.6 (max.) mm
- View Area: 123.5 x 43.0 mm
- Active Area: 118.84x 38.47 mm
- Number of Characters: 20 Characters x 4 Lines
- Dot Size: 0.92 x 1.1 mm
- Dot Pitch: 0.98 x 1.16 mm
- Character Size: 4.84 x 9.22 mm
- Character Pitch: 6.0 x 9.75 mm
- Duty: 1/16
- Backlight Type: LED
- IC: ST7066U
- Interface: 68 series

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Interface Pin Function

Pin No.	Symbol	Level	Description
1	V_{SS}	0V	Ground
2	V_{DD}	5.0V	Supply Voltage for logic
3	VO	(Variable)	Operating voltage for LCD
4	RS	H/L	H: DATA, L: Instruction code
5	R/W	H/L	H: Read (Module --> MPU) L: Write(MPU --> Module)
6	E	H,H→L	Chip 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	—	LED +
16	K	—	LED -
17	NC	—	No connection
18	NC	—	No connection

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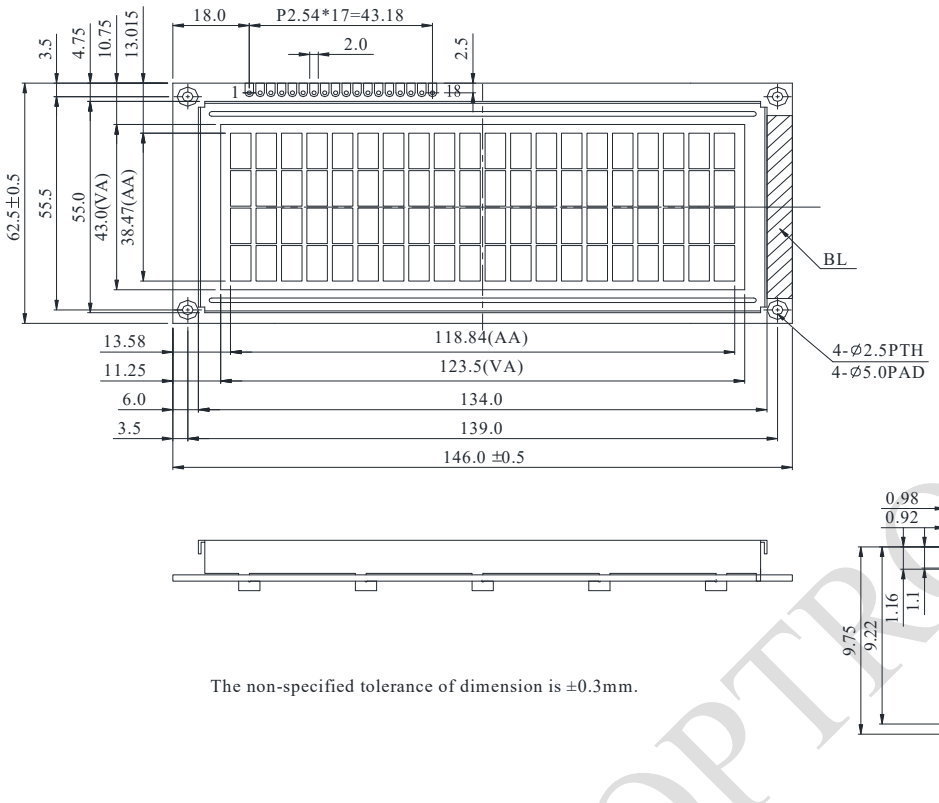
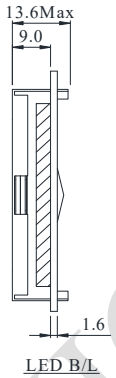
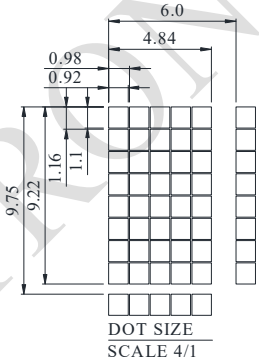
Contour Drawing





PIN NO.	SYMBOL
1	Vss
2	Vdd
3	Vo
4	RS
5	R/$\overline{W}$
6	E
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	A
16	K
17	NC
18	NC



The non-specified tolerance of dimension is ±0.3mm.

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Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	℃
Storage Temperature	T_{ST}	-30	—	+80	℃
Input Voltage	V_I	V_{SS}	—	V_{DD}	V
Supply Voltage For Logic	V_{DD}-V_{SS}	-0.3	—	7	V
Supply Voltage For LCD	V_{DD}-V_o	-0.3	—	13	V

Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	V_{DD}-V_{SS}	—	4.5	5.0	5.5	V
Supply Voltage For LCD	V_{DD}-V_0	Ta=-25℃	—	—	5.4	V
		Ta=25℃	4.1	4.2	4.3	V
		Ta=70℃	3.5	—	—	V
Input High Volt	V_{IH}	—	0.7 V_{DD}	—	V_{DD}	V
Input Low Volt	V_{IL}	—	Vss	—	0.6	V
Output High Volt	V_{OH}	—	3.9	—	V_{DD}	V
Output Low Volt	V_{OL}	—	0	—	0.4	V
Supply Current	I_{DD}	V_{DD}=5.0V	0.4	2.0	4.0	mA

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