Mechanical Data

Item	Standard Value	Unit
Module Dimension	77.0x47.0	mm
Viewing Area	60.0x22.0	mm
Mounting hole	70.0x40.0	mm
Character Size	2.30x4.03	mm

Absolute Maximum Rating

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

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

Electronical Characteristics

Item	Symbol	Condition	Standard Value min.	Standard Value typ.	Standard Value max.	Unit
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	---	8.0	10.0	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	-20°C	5.0	5.1	5.7	V
		0°C	4.6	4.8	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	---	---	---	mA
EL Power Supply Current	IEL	Vel=110VAC;400Hz	---	---	5.0	mA

Display Character Address Code:

Display position

	1	2	3	4	5	6	7	8	9	10	11	12	13	---	---	20
DD RAM Address	00	01														13
DD RAM Address	40	41														53
DD RAM Address	14	15														27
DD RAM Address	54	55														67

Feature

1. 5x8 dots includes cursor
2. Built-in controller (ST 7066 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	Power supply for LED 4.2 V
16	K	Power supply for B/L (0V)

Character type

RC2004B Character 20X4 dots

Dimension drawing

Module Height

	LED	NO
H1	11.9	9.1
H2	7.8	5.0