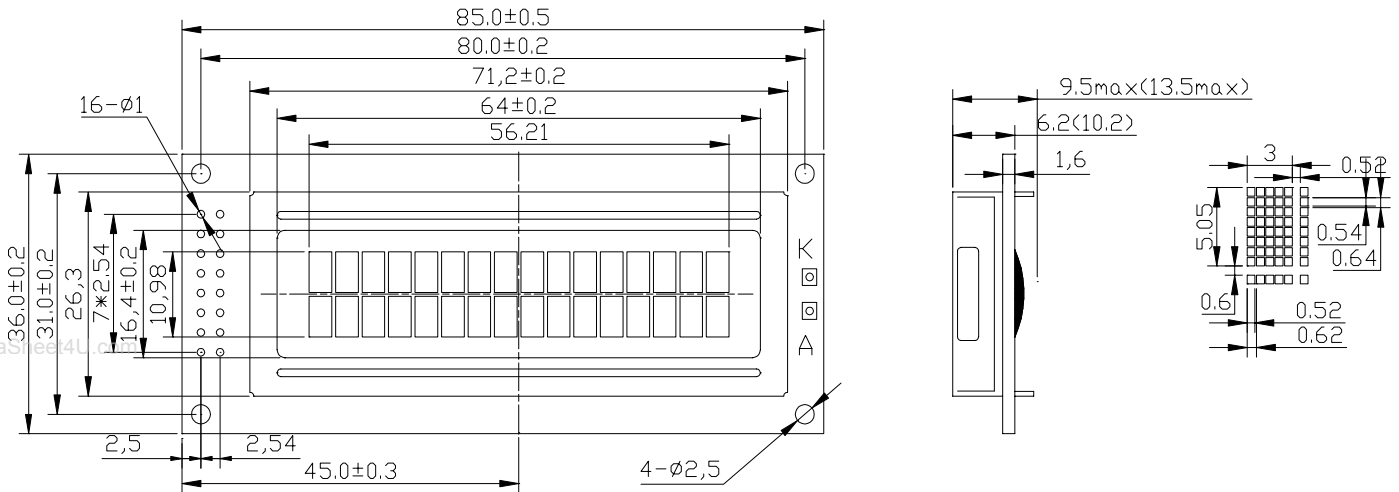


# RT1602-1HSR(L)B

\*16 Characters 2 lines \*Controller LSI built-in \*+5V single power supply

## EXTERNAL DIMENSIONS AND DISPLAY PATTERN



### MECHANICAL DATA (Nominal dimensions)

module size	85.0Wx36.0Hx9.5(13.5)D mm
Effective display area	64.0Wx16.4H mm
Character size(5X8 dots)	3.00Wx5.05H mm
Character pitch	3.52WX5.65H mm
Dot size	0.52Wx0.54H mm

### ABSOLUTE MAXIMUM RATINGS min max

Power supply for logic(Vdd-Vss)	0	7.0V
power supply for LCD drive(Vdd-V0)	0	5.0V
Input voltage(Vi)	Vss	VddV
Operating temperature(Ta)	0	60
Storage temperature(Tstg)	-10	70

### ELECTRICAL CHARACTERISTICS

Ta=25 , Vdd=5.0V±0.5V

Input 'high' voltage(ViH)	3.5Vmin.
Input 'low' voltage(ViL)	0.55Vmax.
Output 'high' voltage(VoH)(-IoH+0.1mA)	3.75Vmin.
Output 'low' voltage(VoL)(IoL=1.2mA)	1.0Vmax.
Power supply current(Idd)(Vdd=5.0V)	2.0mAmax.
Drive method	1/16Duty , 1/5bias.

### PIN CONNECTION

Pin No.	Symbol	Lever	Function
1	Vdd	—	0V
2	Vss	—	+5V
3	Vo	—	—
4	RS	H/L	L:Instruction code input H:Data input
5	R/W	H/L	H:Data read
		H/L	L:Data write
6	E	H,H-L	Enable signal
7	D0	H/L	<b>Data bus line *</b>
8	D1	H/L	
9	D2	H/L	
10	D3	H/L	
11	D4	H/L	
12	D5	H/L	
13	D6	H/L	
14	D7	H/L	
15	LED+	+	Power supply for LED
16	LED-	-	Power supply for LED

### BLOCK DIAGRAM

