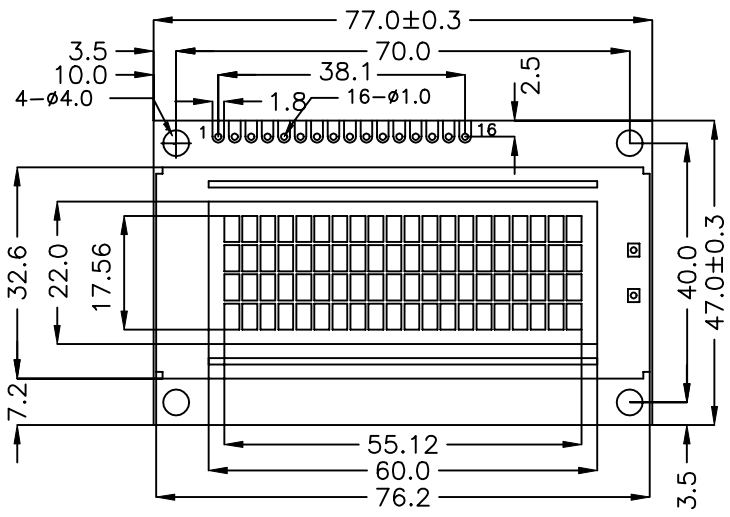


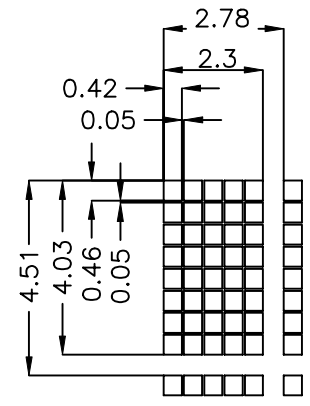
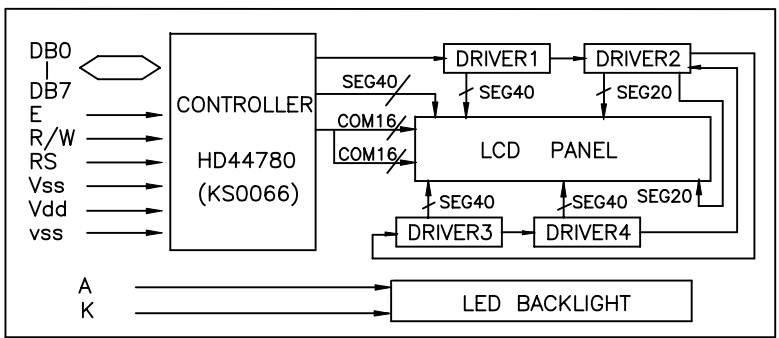
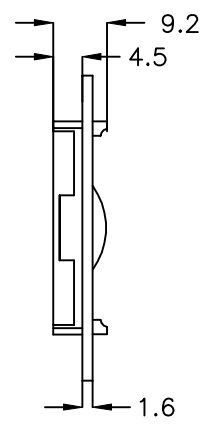
**20 CHAR.
4 LINE**

OPTIONS

- * LCD PANEL
TN or STN
- * View Angle
12H or 6H
- * Character
Eng/Jan
Eng/Rus
Eng/Eur



MAX:13.5mm for LED BACK LIGHT



All dimensions in mm. Tolerance $\pm 0.3\text{mm}$ unless otherwise specified.

MECHANICAL SPECIFICATIONS		
ITEM	SPECIFICATION	UNIT
Overall Size	77.0Wx47.0Hx9.2T(BL13.5T)	mm
Viewing Area	60.0Wx22.0H	mm
Character Number	20Wx4H	
Character Size	2.3Wx4.03H	mm
Character Pitch	2.78Wx4.51H	mm
Dot Size	0.42Wx0.46H	mm

PIN ASSIGNMENT		
PIN	SYMBOL	FUNCTION
1	Vss	Power Supply(GND)
2	Vdd	Power Supply(+5V)
3	Vo	Contrast Adjust
4	RS	Instruction/Data Register Select
5	R/W	Data Read/Write
6	E	Enable Signal
7-14	DB0-DB7	Data Bus Line
15	A	Power Supply for LED BL(+)
16	K	Power Supply for LED B/L(-)

ABSOLUTE MAXIMUM RATINGS				
ITEM	SYMBOL	MIN.	MAX.	UNIT
Power Supply (Logic)	Vdd	-0.3	7.0	V
Power Supply (LCD)	Vo	Vdd-15.0	Vdd+0.3	V
Input Voltage	Vi	-0.3	Vdd	V
Operating Temperature	Topr	0	50	°C
Storage Temperature	Tstg	-20	70	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C, Vdd=5V±0.25V)					
ITEM	SYMBOL	MIN.	MIN.	MAX.	UNIT
Power Supply(Logic)	Vdd	4.5	5.0	5.5	V
Supply Current	Idd	2.0	—	—	mA
LCD Driving Voltage	Vdd-Vo	—	—	13.0	V
Input Voltage "H"	Vih	2.2	—	Vdd	V
Input Voltage "L"	Vil	—	—	0.6	V
Output Voltage "H"	Voh	2.4	—	—	V
Output Voltage "L"	Vol	—	—	0.4	V

LED BACKLIGHT SPECIFICATIONS			
ITEM	TYP.	ITEM	TYP.
Forward Voltage	4.2V	Power Dissipation	1000mW
Forward Current	235mA	Emission Wavelength	570nm