

# 20 CHAR. 4 LINE

## OPTIONS

\* LCD PANEL

TN or STN

\* View Angle

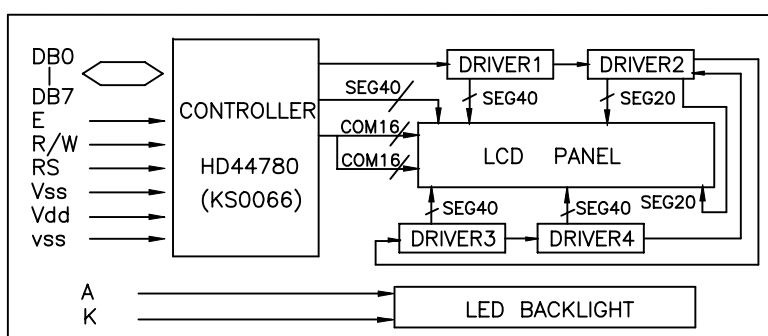
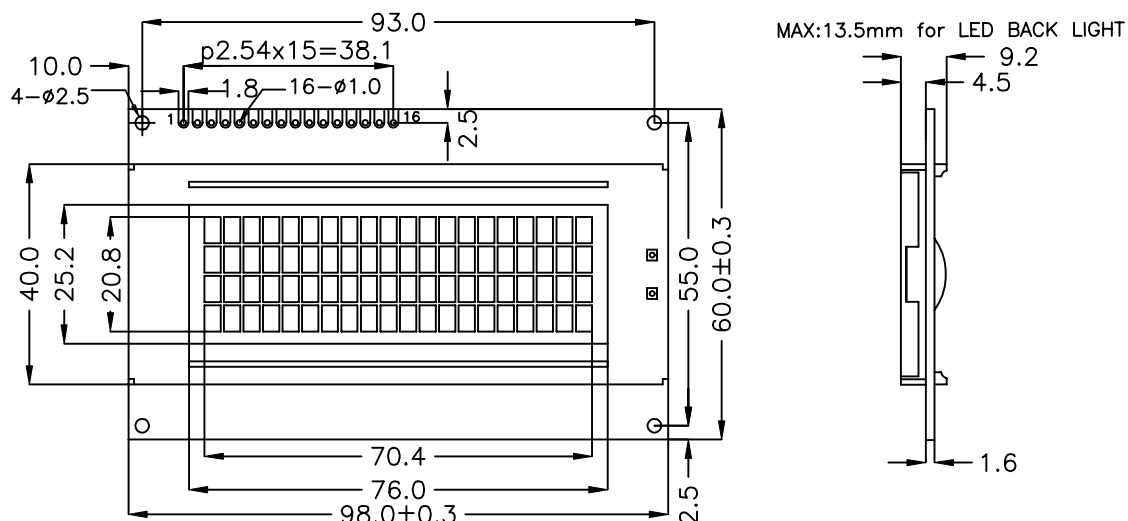
12H or 6H

\* Character

Eng/Jan

Eng/Rus

Eng/Eur



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

### MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATION	UNIT
Overall Size	98.0Wx60.0Hx9.2T(BL13.5T)	mm
Viewing Area	76.0Wx25.2H	mm
Character Number	20Wx4H	
Character Size	2.95Wx4.75H	mm
Character Pitch	3.55Wx5.35H	mm
Dot Size	0.55Wx0.55H	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	1580mW
Forward Current	375mA	Emission Wavelength	570nm