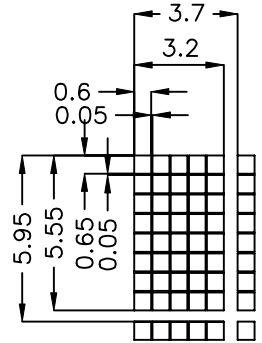
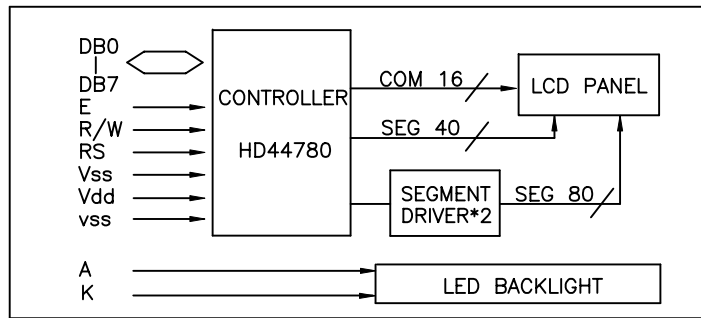
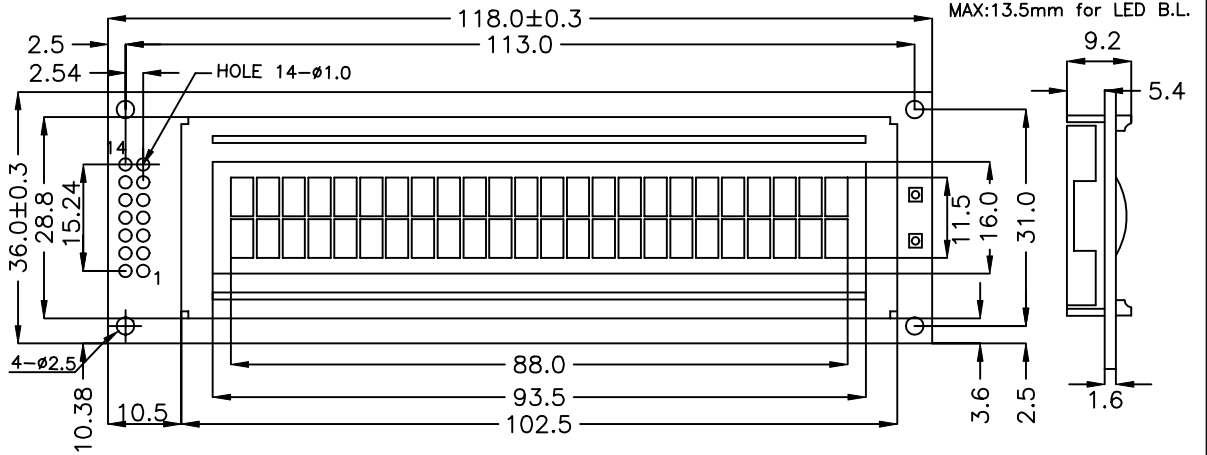


**24 CHAR.  
2 LINE**

## 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     | 118Wx36.0Hx9.2T(BL13.5T) | mm   |
| Viewing Area     | 93.5Wx16.0H              | mm   |
| Character Number | 24Wx2H                   |      |
| Character Size   | 3.2Wx5.55H               | mm   |
| Character Pitch  | 3.7Wx5.95H               | mm   |
| Dot Size         | 0.6Wx0.65H               | 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   | 1200mW |
| Forward Current | 275mA | Emission Wavelength | 570nm  |