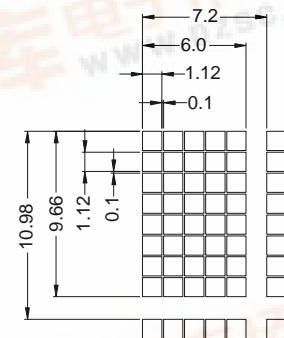
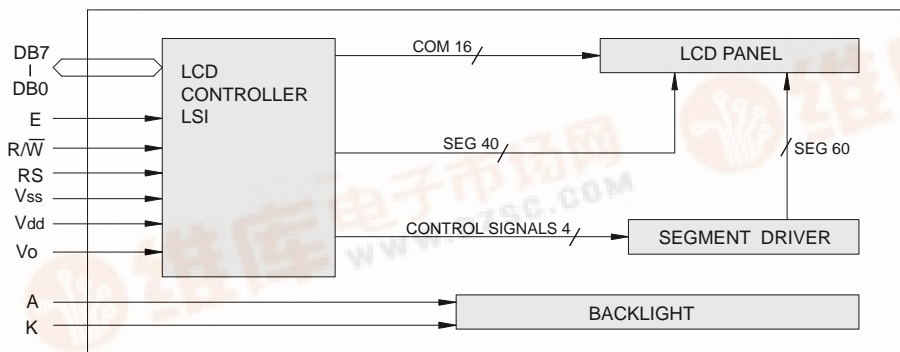
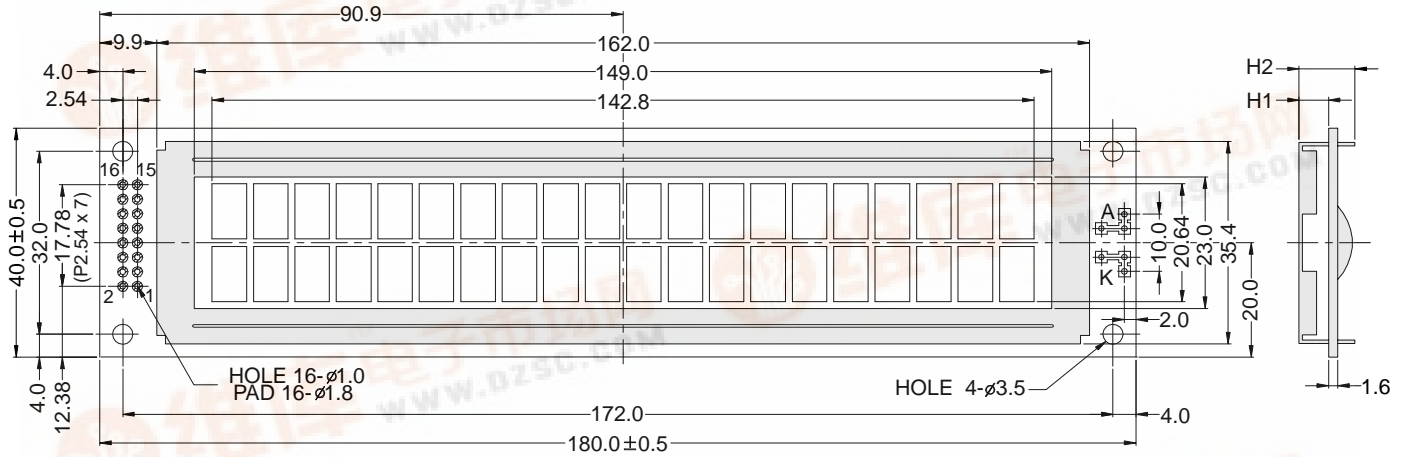


PC 2002-M



OUTLINE DIMENSION & BLOCK DIAGRAM



The tolerance unless classified $\pm 0.3\text{mm}$

MECHANICAL SPECIFICATION

| Overall Size | 180.0 x 40.0 | Module | H2 / H1 |
|--------------|--------------|-----------|-------------|
| View Area | 149.0 x 23.0 | W / O B/L | 5.2 / 9.8 |
| Dot Size | 1.12 x 1.12 | EL B/L | 5.2 / 9.8 |
| Dot Pitch | 1.22 x 1.22 | LED B/L | 10.7 / 15.3 |

PIN ASSIGNMENT

| Pin no. | Symbol | Function |
|---------|--------|------------------------------|
| 1 | Vss | Power supply(GND) |
| 2 | Vdd | Power supply(+) |
| 3 | Vo | Contrast Adjust |
| 4 | RS | Register select signal |
| 5 | R/W | Data read / write |
| 6 | E | Enable signal |
| 7 | DB0 | Data bus line |
| 8 | DB1 | Data bus line |
| 9 | DB2 | Data bus line |
| 10 | DB3 | Data bus line |
| 11 | DB4 | Data bus line |
| 12 | DB5 | Data bus line |
| 13 | DB6 | Data bus line |
| 14 | DB7 | Data bus line |
| 15 | A/Vee | Power supply for LED B/L (+) |
| 16 | K | Power supply for LED B/L (-) |

ABSOLUTE MAXIMUM RATING

| Item | Symbol | Condition | Min. | Max. | Units |
|----------------------------|---------|-----------|------|---------|-------|
| Supply for logic voltage | Vdd-Vss | 25°C | -0.3 | 7 | V |
| LCD driving supply voltage | Vdd-Vee | 25°C | -0.3 | 13 | V |
| Input voltage | Vin | 25°C | -0.3 | Vdd+0.3 | V |

ELECTRICAL CHARACTERISTICS

| Item | Symbol | Condition | Min. | Typical | Max. | Units | | | |
|----------------------------------|-----------|-----------|------|---------|------|-------|-----|-----|---|
| Power supply voltage | Vdd-Vss | 25°C | 2.7 | - | 5.5 | V | | | |
| | | Top | N | W | N | W | N | W | V |
| LCD operation voltage | Vop | -20°C | - | 5 | - | 5.3 | - | 5.6 | V |
| | | 0°C | 4.3 | - | 4.6 | - | 4.9 | - | V |
| | | 25°C | 3.9 | 4.8 | 5.2 | 5.1 | 4.5 | 5.4 | V |
| | | 50°C | 3.7 | - | 4.0 | - | 4.3 | - | V |
| | | 70°C | - | 4.3 | - | 4.8 | - | 5.1 | V |
| LCM current consumption (No B/L) | Idd | Vdd=5V | - | 2 | 3 | mA | | | |
| Backlight current consumption | LED/edge | VB/L=4.2V | - | - | - | mA | | | |
| | LED/array | VB/L=4.2V | - | 360 | - | mA | | | |

