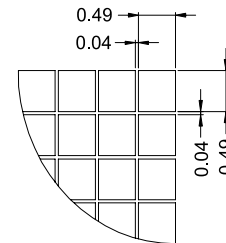
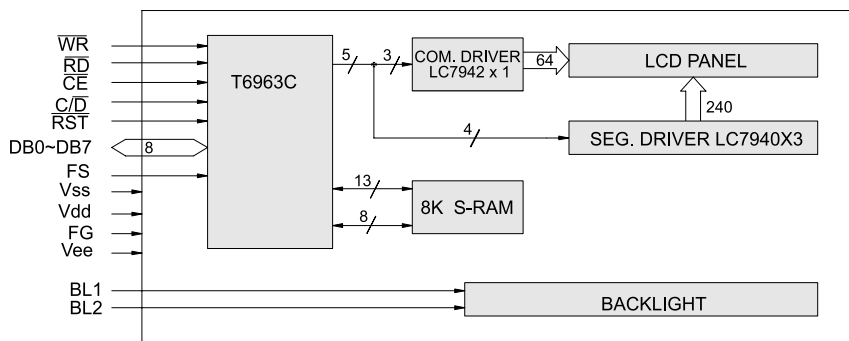
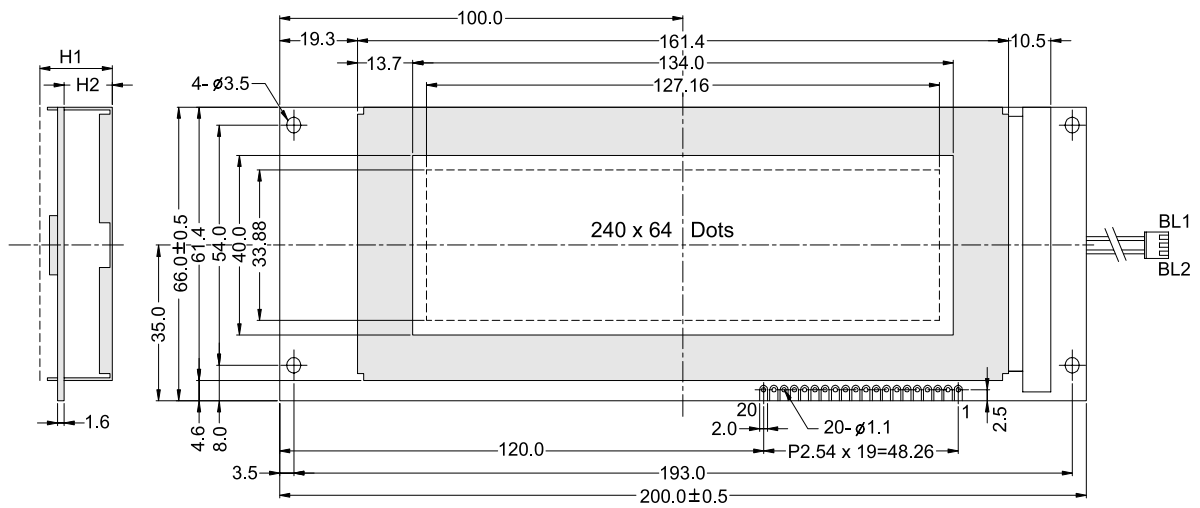


OUTLINE DIMENSION & BLOCK DIAGRAM



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

| MECHANICAL SPECIFICATION | | | |
|--------------------------|--------------|-----------|-------------|
| Overall Size | 200.0 x 66.0 | Module | H2 / H1 |
| View Area | 134.0 x 40.4 | W / O B/L | - / - |
| Dot Size | 0.49 x 0.49 | EL B/L | - / - |
| Dot Pitch | 0.53 x 0.53 | CCFL B/L | 16.0 / 23.0 |

| PIN ASSIGNMENT | | |
|----------------|---------|------------------------|
| Pin no. | Symbol | Function |
| 1 | FG | Frame ground |
| 2 | Vss | Power supply(GND) |
| 3 | Vdd | Power supply(+) |
| 4 | Vee | Negative voltage input |
| 5 | WR | Data write |
| 6 | RD | Data read |
| 7 | CE | Chip enable |
| 8 | C/D | Command / data select |
| 10 | RST | Reaet |
| 11-18 | DB0-DB7 | Data bus line |
| 19 | FS | Font select |
| 9/20 | NC | No Connection |

| ABSOLUTE MAXIMUM RATING | | | | | | | | | |
|----------------------------------|-----------|-----------|------|---------|-------|-------|---|------|---|
| Item | Symbol | Condition | Min. | Max. | Units | | | | |
| Supply for logic voltage | Vdd-Vss | 25°C | -0.3 | 7.0 | V | | | | |
| LCD driving supply voltage | Vdd-Vee | 25°C | 0 | 22.0 | 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 | 4.5 | - | 5.5 | V | | | |
| LCD operation voltage | Vop | Top | N | W | N | W | V | | |
| | | -10°C | - | 14.3 | - | 15.7 | - | 15.1 | V |
| | | 0°C | - | - | - | - | - | - | V |
| | | 25°C | - | 13.2 | - | 13.7 | - | 14.0 | V |
| | | 50°C | - | - | - | - | - | - | V |
| | | 60°C | - | 12.0 | - | 11.4 | - | 12.8 | V |
| LCM current consumption (No B/L) | Idd | Vdd=5V | - | 10 | - | mA | | | |
| Backlight current consumption | LED/edge | VB/L=4.2V | - | - | - | mA | | | |
| | LED/array | VB/L=4.2V | - | - | - | mA | | | |