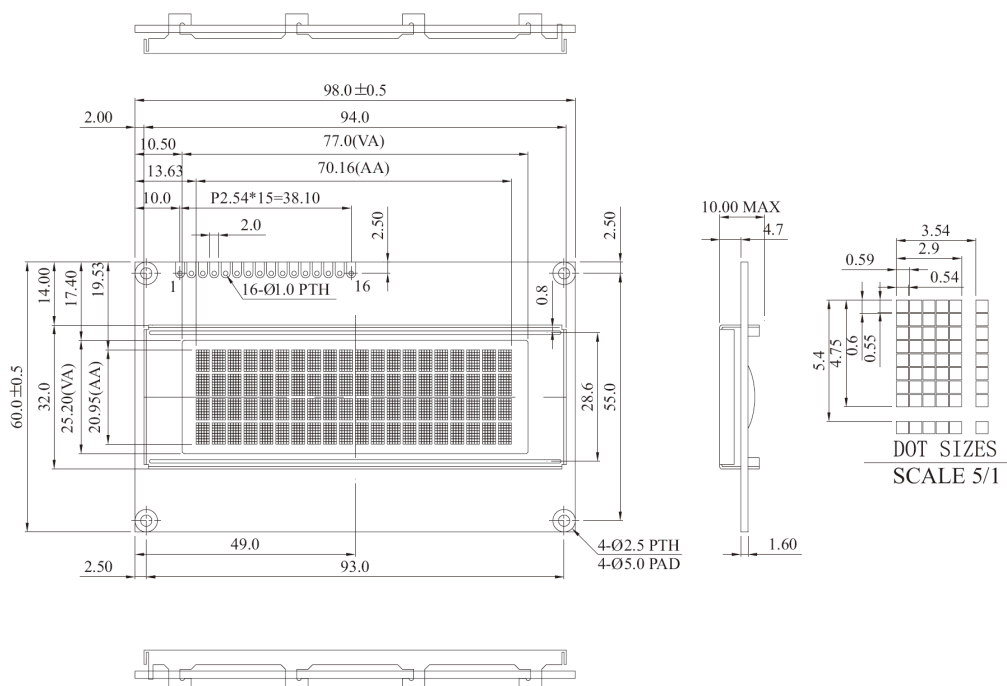


Dimension drawing



Feature

1. 20x4 dots includes cursor
2. Built-in Controller WS0010
3. +5V power supply, +3V optional
4. 1/16 duty cycle
5. Interface: 6800, option 8080 & SPI
6. Sunlight readable & polarizer optional

Mechanical Data

| Item | Dimension | Unit |
|------------------|-------------------------|------|
| Module dimension | 98.0 x 60.0 x 10.0(MAX) | mm |
| View area | 70.0 x 25.2 | mm |
| Active area | 70.16 x 20.95 | mm |
| Mounting hole | 93.0 x 55.0 | mm |
| Dot size | 0.54 x 0.55 | mm |
| Dot pitch | 0.59 x 0.6 | mm |
| Character size | 2.9 x 4.75 | mm |
| Character pitch | 3.54 x 5.4 | mm |

| Pin No. | Symbol | Description |
|---------|--------|---|
| 1 | VSS | Ground |
| 2 | VDD | Supply Voltage for logic |
| 3 | NC | |
| 4 | RS | H: DATA, L: Instruction code |
| 5 | R/W | H: Read(MPU←Module) L: Write(MPU→Module) |
| 6 | E | H→L Enable signal |
| 7 | DB0 | Data bit 0 |
| 8 | DB1 | Data bit 1 |
| 9 | DB2 | Data bit 2 |
| 10 | DB3 | Data bit 3 |
| 11 | DB4 | Data bit 4 |
| 12 | DB5 | Data bit 5 |
| 13 | DB6 | Data bit 6 |
| 14 | DB7 | Data bit 7 |
| 15 | NC | |
| 16 | NC | |

Absolute Maximum Rating

| Item | Symbol | Min | Max | Unit | Notes |
|--------------------------|---------------------|------|-----|------|-------|
| Input Voltage | V _I | -0.3 | VDD | V | |
| Supply Voltage For Logic | VDD-V _{SS} | -0.3 | 5.3 | V | |

Electronical Characteristics

| Item | Symbol | Condition | Min | Typ | Max | Unit |
|--------------------------|-----------------|-------------------------|---------|-----|---------|------|
| Supply Voltage For Logic | VDD-VSS | - | 3.0 | 5.0 | 5.3 | V |
| Input High Volt. | V _{IH} | - | 0.9 VDD | - | VDD | V |
| Input Low Volt. | V _{IL} | - | GND | - | 0.1VDD | V |
| Output High Volt. | V _{OH} | I _{OH} =-0.5mA | 0.8 VDD | - | VDD | V |
| Output Low Volt. | V _{OL} | I _{OL} =0.5mA | GND | - | 0.2 VDD | V |
| Supply Current | IDD | VDD=5V | - | 43 | - | mA |

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