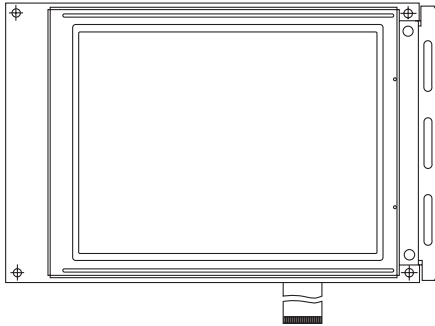


320 x 240 Dots Graphic LCD



FEATURES

- 320 x 240 dots
- + 5V power supply
- 1/240 duty cycle
- No controllers
- Touch screen option (analog type)

| MECHANICAL DATA | | |
|------------------|----------------|------|
| ITEM | STANDARD VALUE | UNIT |
| Module Dimension | 166.8 x 109.0 | mm |
| Viewing Area | 122.0 x 92.0 | mm |
| Dot Size | 0.34 x 0.34 | mm |
| Dot Pitch | 0.36 x 0.36 | mm |
| Mounting Hole | 152.0 x 101.0 | mm |

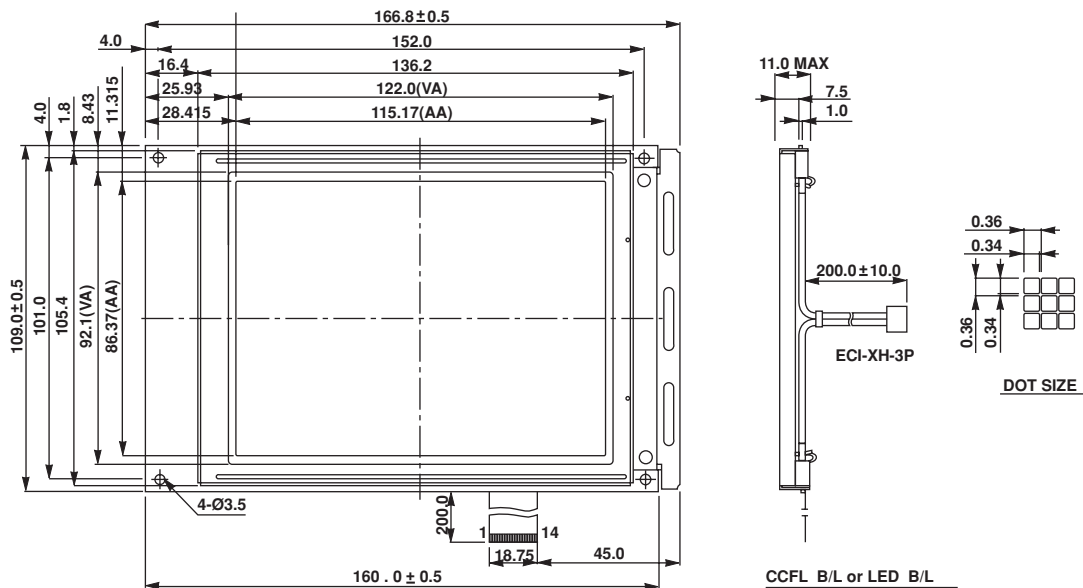
| ABSOLUTE MAXIMUM RATING | | | | | |
|-------------------------|---------|----------------|------|------|------|
| ITEM | SYMBOL | STANDARD VALUE | | | UNIT |
| | | MIN. | TYP. | MAX. | |
| Power Supply | VDD-VSS | 4.75 | 5.0 | 5.25 | V |
| Input Voltage | VI | - 0.3 | - | VDD | V |

NOTE: VSS = 0 Volt, VDD = 5.0 Volt

| ELECTRICAL SPECIFICATIONS | | | | | | |
|--|----------|------------------------|----------------|------|-------------|-------|
| ITEM | SYMBOL | CONDITION | STANDARD VALUE | | | UNIT |
| | | | MIN. | TYP. | MAX. | |
| Input Voltage | VDD | L level | $0.7V_{DD}$ | - | V_{DD} | V |
| | VIO | H level | 0 | - | $0.3V_{DD}$ | V |
| Supply Current | IDD | VDD = + 5V | - | 7.5 | - | mA |
| Recommended LC Driving Voltage for Normal Temp. Version Module | VDD - V0 | 0°C | 22.0 | 23.0 | 24.0 | V |
| | | 25°C | 21.3 | 22.2 | 23.0 | |
| | | 50°C | 19.5 | 20.8 | 22.1 | |
| CCFL Starting Voltage | VFLS | 25°C | - | 600 | - | Vrms |
| CCFL Driving Voltage | VFLD | 25°C | - | 268 | - | Vrms |
| CCFL Driving Current | IFLD | VFQ = 450Vrms 30KHz | - | 5.0 | - | mArms |
| LED Forward Voltage | VF | 25°C | - | 4.2 | 4.6 | V |
| LED Forward Current | IF | 25°C | - | 180 | 360 | mA |
| EL | IEL | Vel = 110VAC; 400Hz | - | - | 5.0 | mA |

| PIN NUMBER | SYMBOL | FUNCTION |
|------------|---------|---|
| 1 | DB0 | Data Bus Line |
| 2 | DB1 | Data Bus Line |
| 3 | DB2 | Data Bus Line |
| 4 | DB3 | Data Bus Line |
| 5 | DISPOFF | H: ON L: OFF |
| 6 | FRAME | First Line Marker |
| 7 | M(NC) | Frame Reverse Signal (Alternate Signal) |
| 8 | LP | Data Latch |
| 9 | CP | Data Shift |
| 10 | Vdd | Power Supply for LOGIC |
| 11 | Vss | GND |
| 12 | Vee | Power Supply for LCD |
| 13 | V0 | Operating Voltage LCD Driving |
| 14 | FGND | Film Ground |

DIMENSIONS in millimeters





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