



PC2002D-O Series (20x2) Character Display

Features

- *20 Character, 2 Line
- *View Angle 12H or 6H
- *STN Fluid Yellow, Gray or Blue
- *Extended Temperature Range available
- *LED Backlight available
- *RoHS Compliant



Absolute Maximum Ratings at T_A = 25°C

| Item | Symbol | Min | Max | Unit |
|----------------------------------|---------------|-------|---------|------|
| Power Supply (Logic) | Vdd | -0.3 | 7.0 | V |
| Power Supply (LCD) | Vlcd (Vdd-Vo) | -13.5 | 0.3 | V |
| Input Voltage | Vi | -0.3 | Vdd+0.3 | V |
| Operating Temperature (Standard) | Topr | 0 | 50 | °C |
| Storage Temperature (Standard) | Tstg | -10 | 60 | °C |
| Extended Operating Temperature | Topr | -20 | 70 | °C |
| Extended Storage Temperature | Tstg | -30 | 80 | °C |

Electrical Characteristics at T_A = 25°C, Vdd=5V±0.25V

| Item | Symbol | Min | Typ | Max | Unit |
|----------------------|---------|-----|-----|-----|------|
| Power Supply (Logic) | Vdd-Vss | 4.5 | 5.0 | 5.5 | V |
| Supply Current | Idd | 0.5 | 1.0 | 2.0 | mA |
| LCD Driving Voltage | Vdd -Vo | 4.1 | 4.9 | 5.0 | V |
| LCD Driving Current | Ilcd | - | 0.2 | 0.4 | mA |

Interface Pin Connection

| No | Symbol | Function | No | Symbol | Function |
|----|--------|-----------------------------|----|--------|------------------------------------|
| 1 | Vss | Power Supply (GND) | 9 | DB2 | Data Bus Line 2 |
| 2 | Vdd | Power Supply (+5V) | 10 | DB3 | Data Bus Line 3 |
| 3 | Vo | Contrast Adjust | 11 | DB4 | Data Bus Line 4 |
| 4 | RS | Instruction/Register Select | 12 | DB5 | Data Bus Line 5 |
| 5 | R/W | Read/Write | 13 | DB6 | Data Bus Line 6 |
| 6 | E | Enable Signal | 14 | DB7 | Data Bus Line 7 |
| 7 | DB0 | Data Bus Line 0 | 15 | A | Power Supply for LED Backlight (+) |
| 8 | DB1 | Data Bus Line 1 | 16 | K | Power Supply for LED Backlight (-) |

LED Backlight Specifications

| Forward Voltage | Forward Current | Power Dissipation | Peak Wavelength |
|-----------------|-----------------|-------------------|-----------------|
| 4.3V (Max) | 210mA (Max) | 903mW (Max) | 570nm (Typ) |

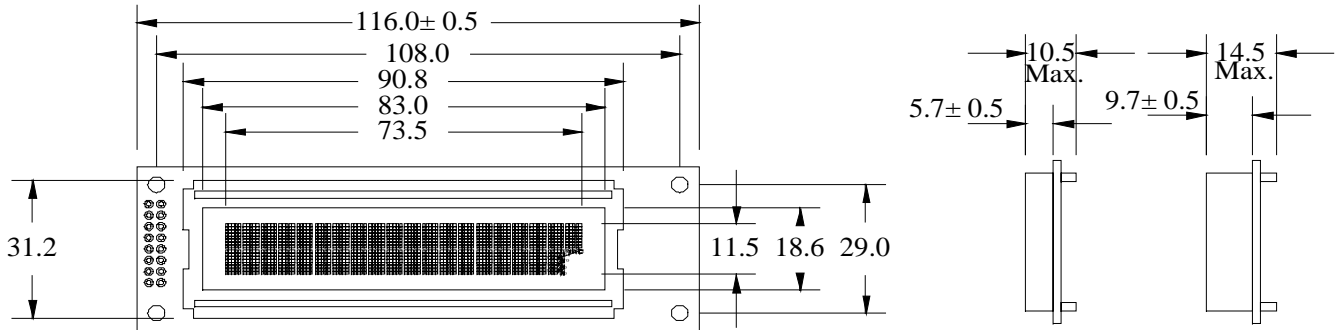
Mechanical Specifications

| Item | Overall Size | Viewing Area | Character Size | Character Pitch | Dot Size |
|----------------|-------------------------------|---------------|----------------|-----------------|---------------|
| Specifications | 116.0W x 37.0H x 10.5/BL14.5T | 83.0W x 18.6H | 3.20W x 5.55H | 3.70x5.95 | 0.60W x 0.65H |

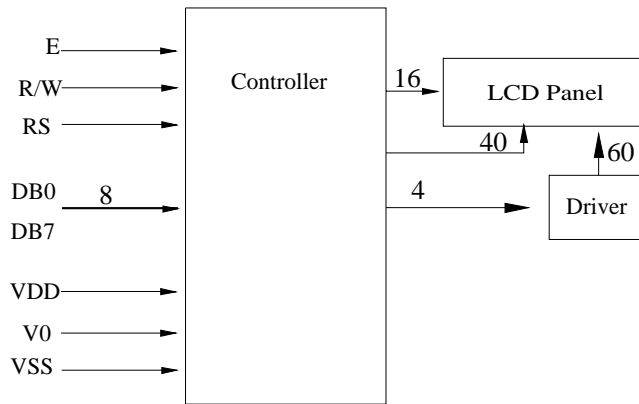
All dimensions are in mm. Tolerance is ± 0.3 Unless otherwise specified



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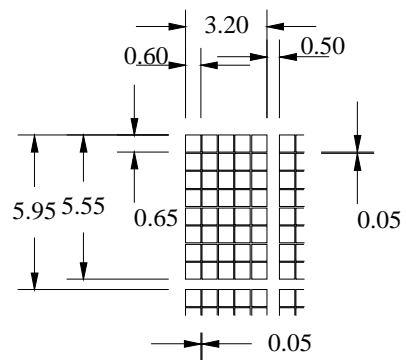


LCD Block Diagram



S6A0069 or Equivalent

Dot Layout



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