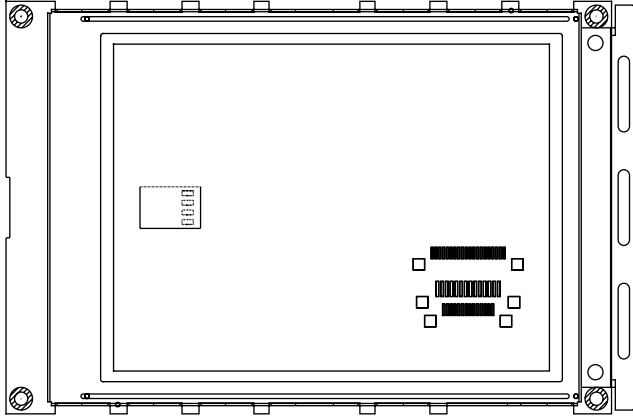


320 x 240 Graphic LCD



FEATURES

- Type: Graphic
- Display format: 320 x 240 dots
- Built-in controller: RA8803
- Duty cycle: 1/240
- Built-in N.V.
- Touch screen option
- Temperature compensation option
- Chinese version
- Same size with LCD-320H240B
- Compliant to RoHS directive 2002/95/EC


RoHS
COMPLIANT

MECHANICAL DATA

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

ABSOLUTE MAXIMUM RATINGS

| ITEM | SYMBOL | STANDARD VALUE | | | UNIT |
|---------------|----------------------|----------------|------|----------|------|
| | | MIN. | TYP. | MAX. | |
| Power Supply | V_{DD} to V_{SS} | 4.75 | 5.0 | 5.25 | V |
| Input Voltage | V_I | - 0.3 | - | V_{DD} | |

Note

- $V_{SS} = 0$ V, $V_{DD} = 5.0$ V

ELECTRICAL CHARACTERISTICS

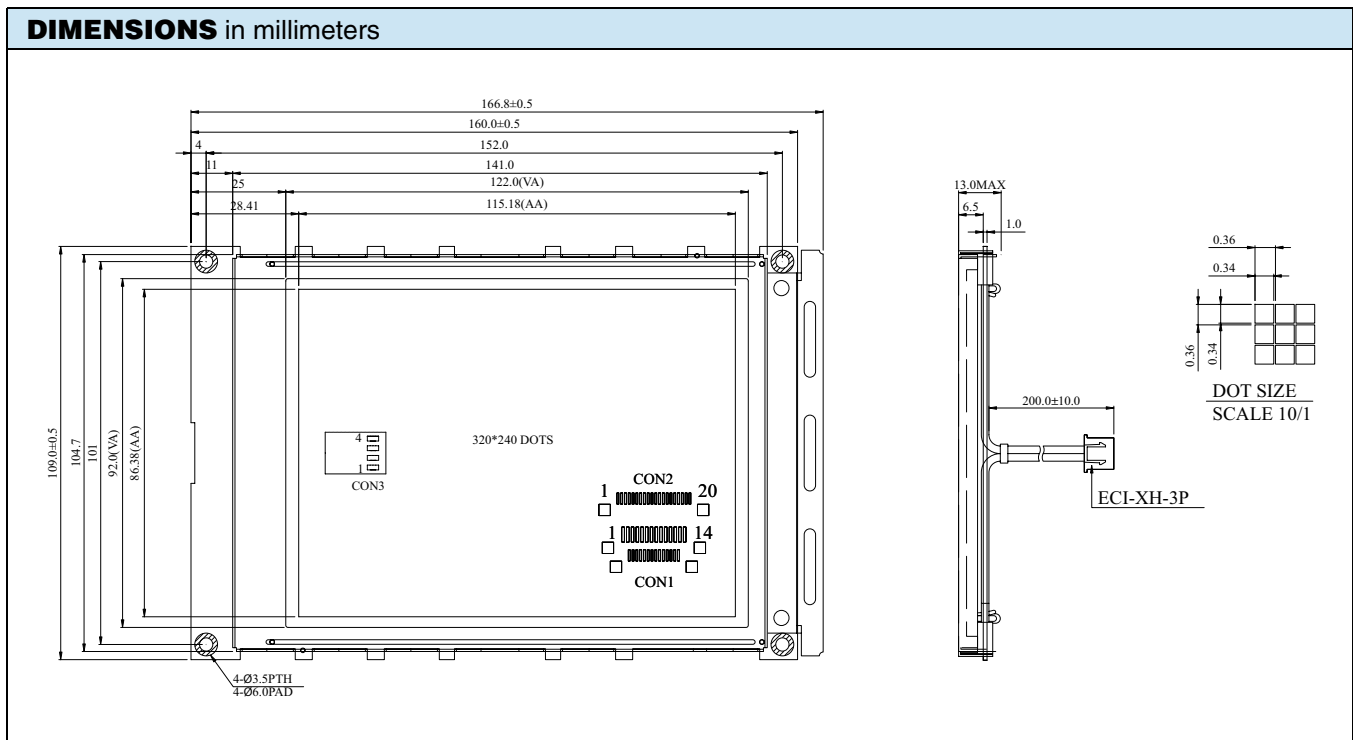
| ITEM | SYMBOL | CONDITION | STANDARD VALUE | | | UNIT |
|--|-------------------|--------------------------------|----------------|-------|------|------------|
| | | | MIN. | TYP. | MAX. | |
| Input Voltage | V_{DD} | - | 4.5 | 5.0 | 5.5 | V |
| Supply Current | I_{DD} | $V_{DD} = + 5.0$ V | - | 110.0 | - | mA |
| Recommended LC Driving Voltage for Normal Temperature Version Module | V_0 to V_{SS} | - 20 °C | - | - | 26.1 | V |
| | | 25 °C | - | 23.8 | - | |
| | | 70 °C | 20.9 | - | - | |
| CCFL Starting Voltage | V_{FLS} | 25 °C | - | 600 | - | V_{RMS} |
| CCFL Driving Voltage | V_{FLD} | 25 °C | - | 270 | - | V_{RMS} |
| CCFL Driving Current | I_{FLD} | $V_{FQ} = 450 V_{RMS}, 30$ kHz | 4.8 | 5.3 | 5.5 | mA_{RMS} |
| LED Forward Voltage | V_F | 25 °C | - | 4.2 | 4.6 | V |
| LED Forward Current | I_F | 25 °C | - | 180 | 360 | mA |
| EL Power Supply Current | I_{EF} | $V_{EL} = 110 V_{AC}, 400$ Hz | - | - | 5.0 | mA |

OPTIONS

| PROCESS COLOR | | | | | | BACKLIGHT | | | |
|---------------|----------|------------|----------|----------|-----------|-----------|-----|----|------|
| TN | STN Gray | STN Yellow | STN Blue | FSTN B&W | STN Color | None | LED | EL | CCFL |
| | x | x | x | x | | x | x | x | x |

For detailed information, please see the "Product Numbering System" document.

| INTERFACE PIN FUNCTION | | | |
|------------------------|-----------------|---------|--|
| PIN NO. | SYMBOL | PIN NO. | FUNCTION |
| 1 | V_{SS} | | Ground |
| 2 | V_{DD} | | Power supply for logic |
| 3 | V_0 | | Driving voltage for LCD |
| 4 | RS | | Register/data select |
| 5 | \overline{WR} | | 8080 family: Write signal/6800 family: R/W signal |
| 6 | \overline{RD} | | 8080 family: Read signal/6800 family: Enable clock |
| 7 | DB0 | | Date bus line |
| 8 | DB1 | | Date bus line |
| 9 | DB2 | | Date bus line |
| 10 | DB3 | | Date bus line |
| 11 | DB4 | | Date bus line |
| 12 | DB5 | | Date bus line |
| 13 | DB6 | | Date bus line |
| 14 | DB7 | | Date bus line |
| 15 | \overline{CS} | | Chip select |
| 16 | RES | | Reset |
| 17 | V_{EE} | | Negative voltage output |
| 18 | BUSY | | RA8803 start |
| 19 | INT | | Programmable interrupt for 8803 |
| 20 | NC | | No connection |





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