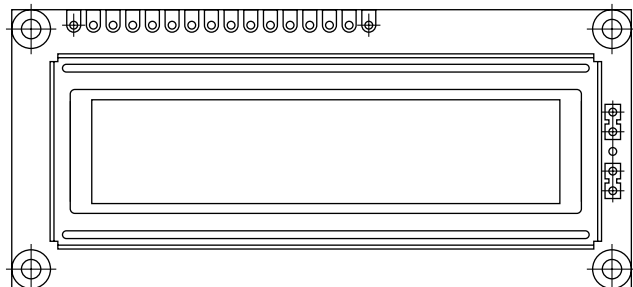


144 x 32 Graphic LCD



FEATURES

- Type: Graphic
- Display format: 144 x 32 dots
- Built-in controller: ST7920
- Duty cycle: 1/32
- + 5 V power supply
- LED can be driven by pin 15, pin 16 or A, K
- Chinese version
- Same size with LCD-016N002B
- Compliant to RoHS directive 2002/95/EC


RoHS
COMPLIANT

| MECHANICAL DATA | | |
|------------------|----------------|------|
| ITEM | STANDARD VALUE | UNIT |
| Module Dimension | 80.0 x 36.0 | mm |
| Viewing Area | 66.0 x 16.0 | |
| Dot Size | 0.38 x 0.38 | |
| Dot Pitch | 0.42 x 0.42 | |
| Mounting Hole | 75.0 x 31.0 | |
| Character Size | N/a | |

| ABSOLUTE MAXIMUM RATINGS | | | | | |
|--------------------------|----------------------|----------------|------|----------|------|
| ITEM | SYMBOL | STANDARD VALUE | | | UNIT |
| | | MIN. | TYP. | MAX. | |
| Power Supply | V_{DD} to V_{SS} | 0 | - | 7.0 | V |
| Input Voltage | V_I | 0 | - | 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} | $V_{DD} = +5$ V | 4.5 | 5.0 | 5.5 | V |
| Supply Current | I_{DD} | $V_{DD} = +5$ V | - | 1.2 | 1.5 | mA |
| Recommended LC Driving Voltage for Normal Temperature Version Module | V_{DD} to V_0 | - 20 °C | - | - | 6.0 | V |
| | | 0 °C | - | - | 5.0 | |
| | | 25 °C | - | 4.7 | - | |
| | | 50 °C | 4.4 | - | - | |
| | | 70 °C | 4.0 | - | - | |
| LED Forward Voltage | V_F | 25 °C | - | 4.0 | 4.3 | V |
| LED Forward Current - Array | I_F | 25 °C | - | 130 | 260 | mA |
| LED Forward Current - Edge | | | - | 20 | 40 | |

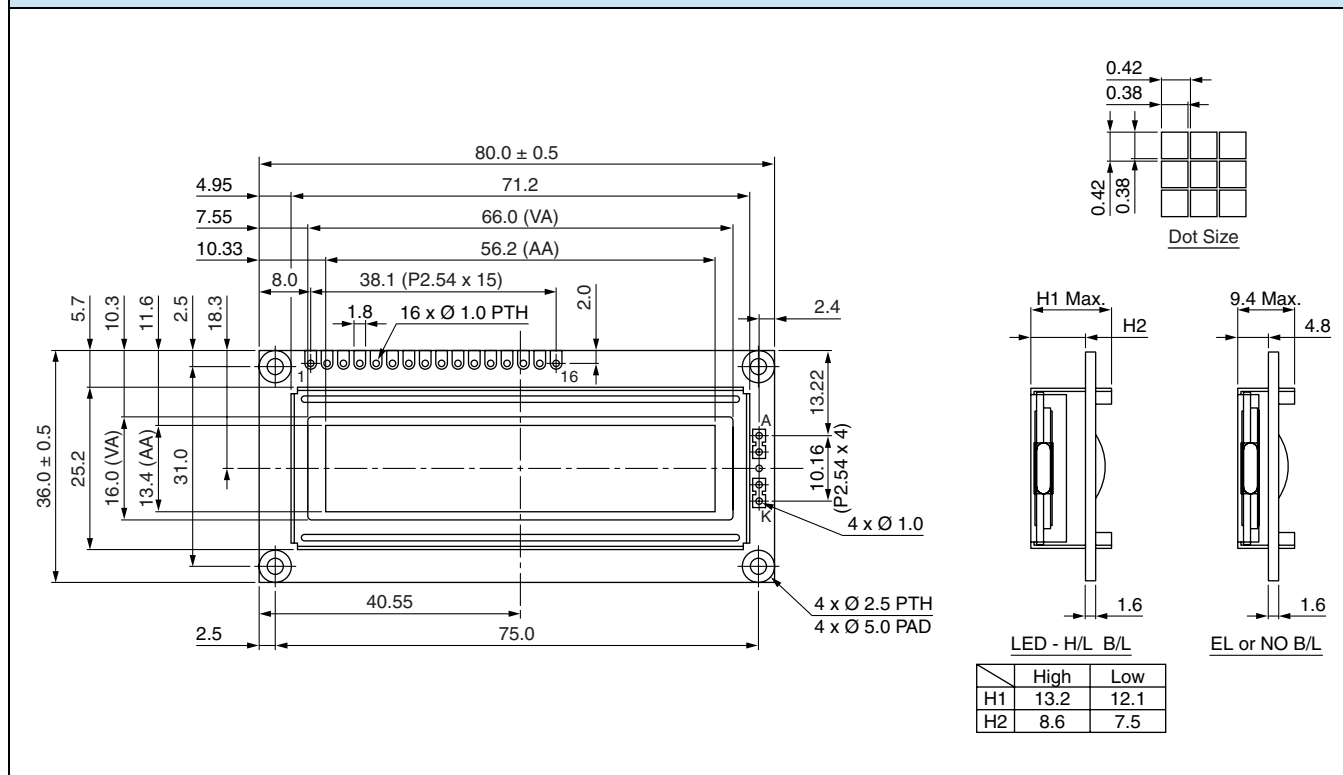
| OPTIONS | | | | | | | | | |
|---------------|----------|------------|----------|----------|-----------|-----------|-----|----|------|
| PROCESS COLOR | | | | | | BACKLIGHT | | | |
| TN | STN Gray | STN Yellow | STN Blue | FSTN B&W | STN Color | None | LED | EL | CCFL |
| | x | x | x | x | | x | x |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

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

INTERFACE PIN FUNCTION

| PIN NO. | SYMBOL | FUNCTION |
|---------|-----------------|----------------------------|
| 1 | V _{SS} | Ground |
| 2 | V _{DD} | Power supply (+ 5 V) |
| 3 | V ₀ | NC |
| 4 | RS | H/L register select signal |
| 5 | R/W | H/L read/write signal |
| 6 | E | H → L enable signal |
| 7 | DB0 | H/L data bus line |
| 8 | DB1 | H/L data bus line |
| 9 | DB2 | H/L data bus line |
| 10 | DB3 | H/L data bus line |
| 11 | DB4 | H/L data bus line |
| 12 | DB5 | H/L data bus line |
| 13 | DB6 | H/L data bus line |
| 14 | DB7 | H/L data bus line |
| 15 | A | Power supply for B/L |
| 16 | K | Power supply for B/L |

DIMENSIONS in millimeters





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