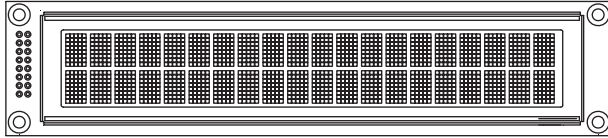


20 x 2 Character OLED



FEATURES

- Type: Character
- Display format: 20 x 2 characters
- Built-in controller: OLED-0010
- Duty cycle: 1/16
- +5 V power supply, +3 V optional
- Interface: 6800, option 8080 and SPI
- Sunlight readable and polarizer optional
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

| MECHANICAL DATA | | |
|------------------|---------------------------|------|
| ITEM | STANDARD VALUE | UNIT |
| Module dimension | 180.0 x 40.0 x 9.3 (max.) | mm |
| Viewing area | 149.0 x 23.0 | |
| Active area | 145.08 x 20.64 | |
| Dot size | 1.12 x 1.12 | |
| Dot pitch | 1.22 x 1.22 | |
| Mounting hole | 172.0 x 32.0 | |
| Character size | 6.0 x 9.66 | |
| Character pitch | 7.32 x 10.98 | |

| ABSOLUTE MAXIMUM RATINGS | | | | |
|--------------------------|----------------------|----------------|----------|------|
| ITEM | SYMBOL | STANDARD VALUE | | UNIT |
| | | MIN. | MAX. | |
| Supply voltage for logic | V_{DD} to V_{SS} | -0.3 | 5.3 | V |
| Input voltage | V_I | -0.3 | V_{DD} | |

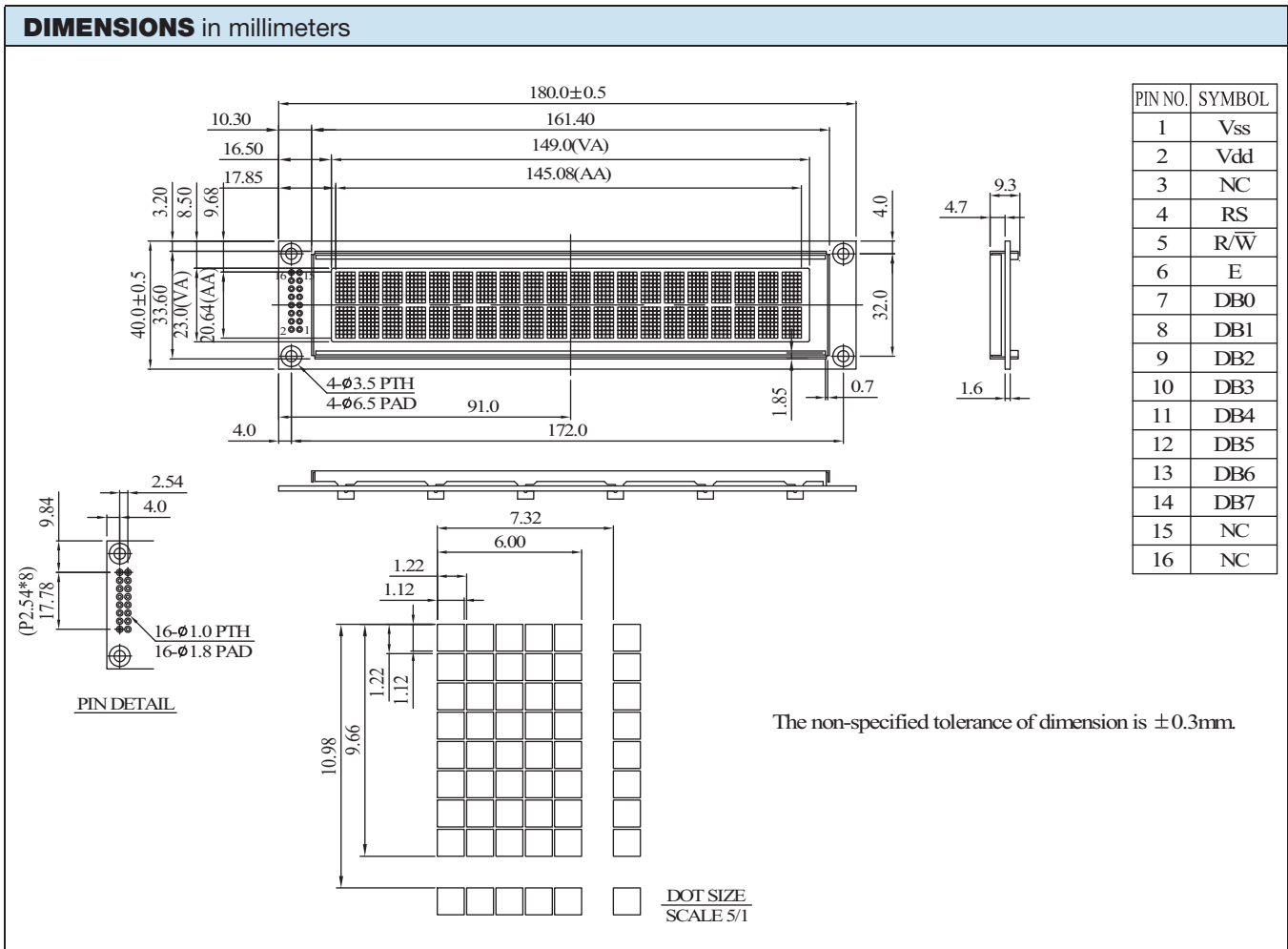
Note

- $V_{SS} = 0$ V, $V_{DD} = 3.0$ V/5.0 V

| ELECTRICAL CHARACTERISTICS | | | | | | |
|----------------------------|----------------------|-------------------|----------------|------|--------------|------|
| ITEM | SYMBOL | CONDITION | STANDARD VALUE | | | UNIT |
| | | | MIN. | TYP. | MAX. | |
| Supply voltage for logic | V_{DD} to V_{SS} | - | 3.0 | 5.0 | 5.3 | V |
| Input high voltage | V_{IH} | - | $0.9 V_{DD}$ | - | V_{DD} | V |
| Input low voltage | V_{IL} | - | GND | - | $0.1 V_{DD}$ | V |
| Output high voltage | V_{OH} | $I_{OH} = 0.5$ mA | $0.8 V_{DD}$ | - | V_{DD} | V |
| Output low voltage | V_{OL} | $I_{OL} = 0.5$ mA | GND | - | $0.2 V_{DD}$ | V |
| Supply current | I_{DD} | $V_{DD} = 5$ V | - | 30 | - | mA |

| OPTIONS | | | | | | | | | |
|----------------|-------|-----|------|-------|--------|-------|-----|------|-------|
| EMITTING COLOR | | | | | MOQ | | | | |
| YELLOW | GREEN | RED | BLUE | WHITE | YELLOW | GREEN | RED | BLUE | WHITE |
| Y | - | - | - | - | N | - | - | - | - |

| INTERFACE PIN FUNCTION | | |
|------------------------|-----------------|---|
| PIN NO. | SYMBOL | FUNCTION |
| 1 | V _{SS} | Ground |
| 2 | V _{DD} | Supply voltage for logic |
| 3 | NC | No connection |
| 4 | RS | H: Data; L: Instruction code |
| 5 | R \bar{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 | No connection |
| 16 | NC | No connection |





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