OLED-020N004B

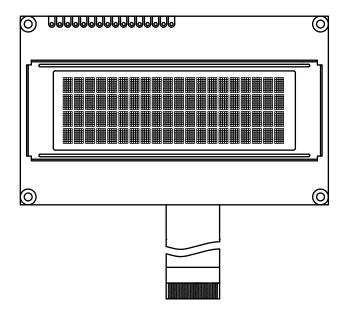


Vishay

RoHS

COMPLIANT

20 x 4 Character OLED



FEATURES

- Type: Character
- Display format: 20 x 4 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 <u>www.vishay.com/doc?99912</u>

| MECHANICAL DATA | | | | | |
|------------------|---------------------------|------|--|--|--|
| ITEM | STANDARD VALUE | UNIT | | | |
| Module dimension | 98.0 x 60.0 x 10.0 (max.) | | | | |
| Viewing area | 70.0 x 25.2 | | | | |
| Active area | 70.16 x 20.95 | | | | |
| Dot size | 0.54 x 0.55 | | | | |
| Dot pitch | 0.59 x 0.60 | mm | | | |
| Mounting hole | 93.0 x 55.0 | | | | |
| Character size | 2.9 x 4.75 | 7 | | | |
| Character pitch | 3.54 x 5.4 | | | | |

| ABSOLUTE MAXIMUM RATINGS | | | | | | |
|-----------------------------|------------------------------------|---------|----------|------|--|--|
| ITEM | SYMBOL | STANDAF | UNIT | | | |
| | STWIDOL | MIN. | MAX. | UNIT | | |
| Supply voltage for logic | V_{DD} to V_{SS} | -0.3 | 5.3 | v | | |
| Input voltage | VI | -0.3 | V_{DD} | | | |

Note

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

| ELECTRICAL CHARACTERISTICS | | | | | | |
|----------------------------|------------------------------------|--------------------------|---------------------|------|---------------------|------|
| ITEM | SYMBOL | CONDITION | STANDARD VALUE | | | |
| | | CONDITION | MIN. | TYP. | MAX. | UNIT |
| 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} | $V_{DD} = 5 V$ | - | 43 | - | mA |

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

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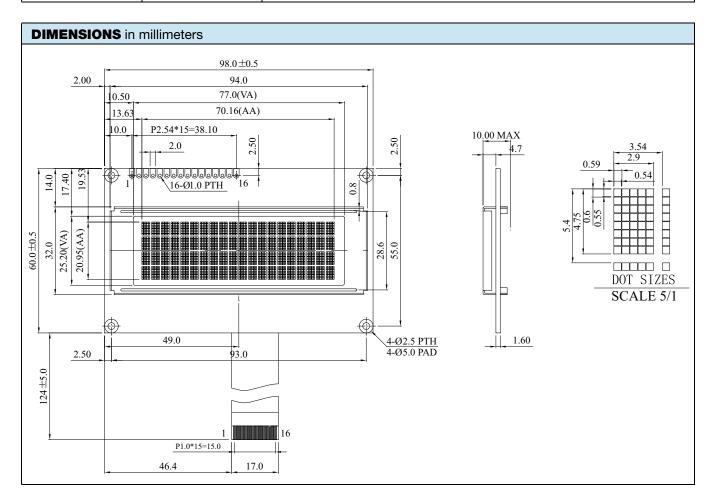


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| INTERFACE PIN FUNCTION | | | | | |
|------------------------|-----------------|--|--|--|--|
| PIN NO. | SYMBOL | FUNCTION | | | |
| 1 | V _{SS} | Ground | | | |
| 2 | V _{DD} | Supply voltage for logic | | | |
| 3 | NC | No connection | | | |
| 4 | RS | H: Data; L: Instruction code | | | |
| 5 | R/W | H: Read (MPU \leftarrow Module); L: Write (MPU \rightarrow Module) | | | |
| 6 | E | $H \rightarrow L$ 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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