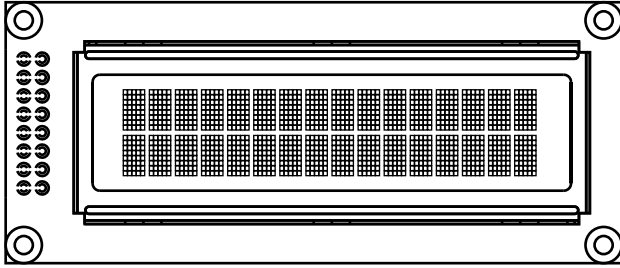


## 16 x 2 Character OLED



### FEATURES

- Type: Character
- Display format: 16 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](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

| MECHANICAL DATA  |                           |      |
|------------------|---------------------------|------|
| ITEM             | STANDARD VALUE            | UNIT |
| Module dimension | 85.0 x 36.0 x 10.0 (max.) | mm   |
| Viewing area     | 66.0 x 16.0               |      |
| Active area      | 56.95 x 11.85             |      |
| Dot size         | 0.55 x 0.65               |      |
| Dot pitch        | 0.60 x 0.70               |      |
| Mounting hole    | 80.0 x 31.0               |      |
| Character size   | 2.95 x 5.55               |      |
| Character pitch  | 3.6 x 6.3                 |      |

| 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           | $V_{DD}$ |      |

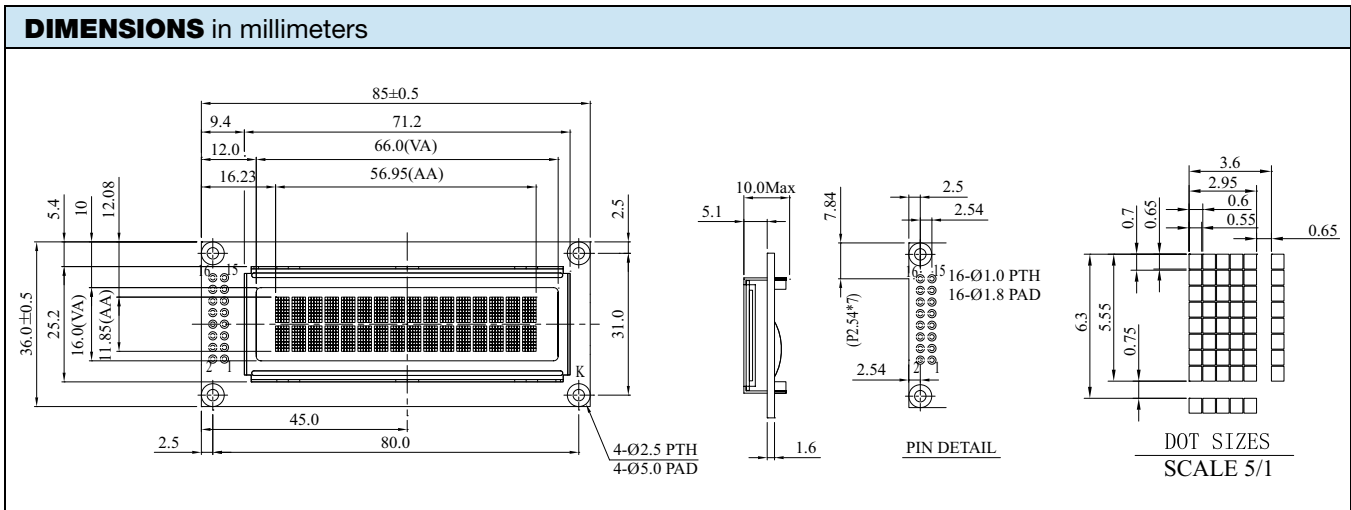
#### Note

- $V_{SS} = 0$  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              | Y     | Y   | Y    | Y     | N      | Y     | Y   | Y    | Y     |

| INTERFACE PIN FUNCTION |                  |                                                 |
|------------------------|------------------|-------------------------------------------------|
| PIN NO.                | SYMBOL           | FUNCTION                                        |
| 1                      | V <sub>SS</sub>  | Ground                                          |
| 2                      | V <sub>DD</sub>  | Supply voltage for logic                        |
| 3                      | NC               | No connection                                   |
| 4                      | RS               | H: Data; L: Instruction code                    |
| 5                      | R $\overline{W}$ | 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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