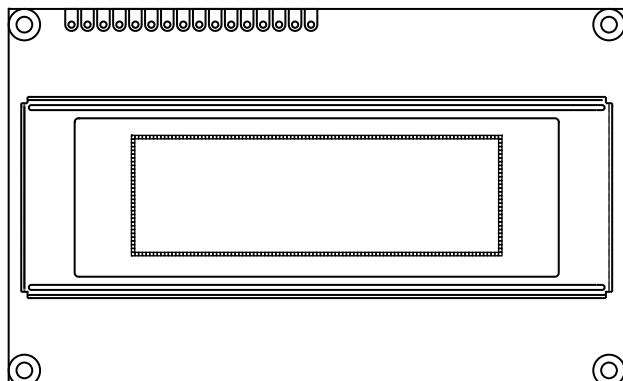


# 100 x 32 Graphic OLED



## FEATURES

- Type: Graphic
- Display format: 100 x 32 dots
- 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 | 98.0 x 60.0 x 10.0 (max.) | mm   |
| Viewing area     | 77.0 x 25.20              |      |
| Active area      | 58.95 x 19.15             |      |
| Dot size         | 0.54 x 0.55               |      |
| Dot pitch        | 0.59 x 0.60               |      |
| Mounting hole    | 93.0 x 55.0               |      |

## 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    | -              | 43   | -            | mA   |

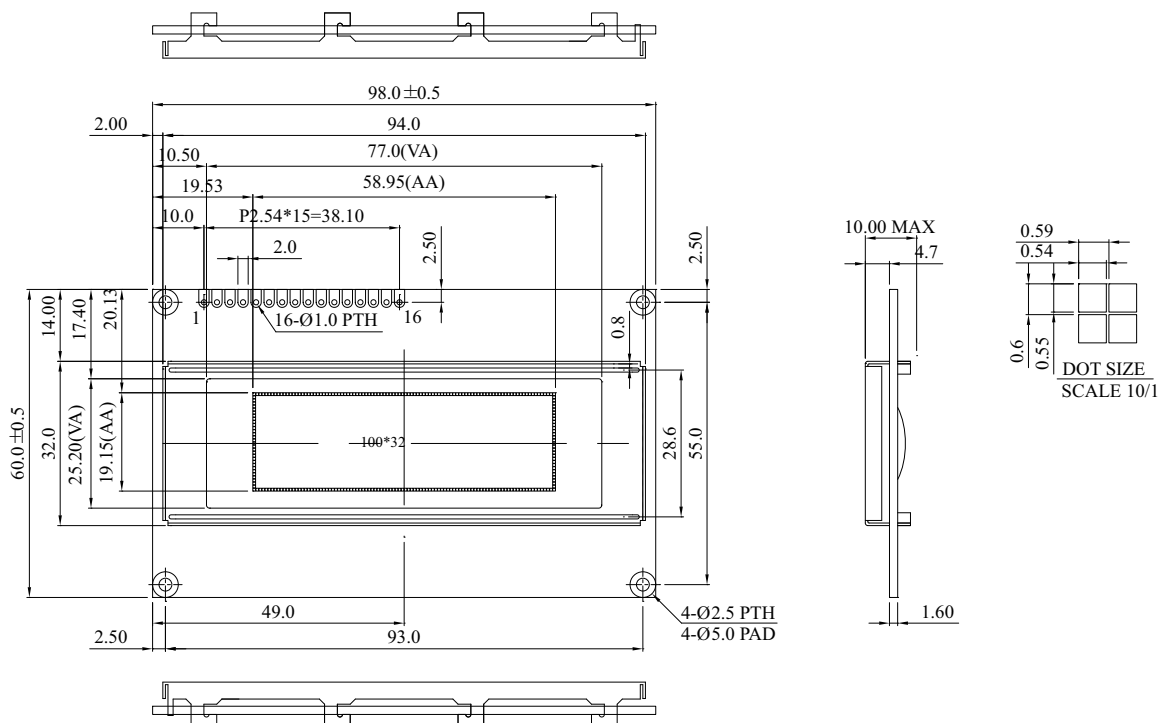
## OPTIONS

| EMITTING COLOR |       |     |      |       | MOQ    |       |     |      |       |
|----------------|-------|-----|------|-------|--------|-------|-----|------|-------|
| YELLOW         | GREEN | RED | BLUE | WHITE | YELLOW | GREEN | RED | BLUE | WHITE |
| Y              | Y     | Y   | -    | -     | N      | 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 $\leftarrow$ 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      | CS1               | Chip1 select input pin                                                 |
| 16      | CS2               | Chip2 select input pin                                                 |

**DIMENSIONS** in millimeters





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