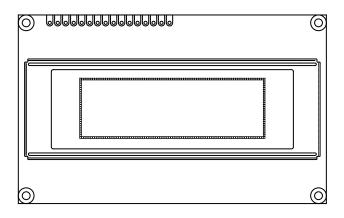
# **OLED-100H032A**



Vishay

# 100 x 32 Graphic OLED



| MECHANICAL DATA  |                           |      |  |  |
|------------------|---------------------------|------|--|--|
| ITEM             | STANDARD VALUE            | UNIT |  |  |
| Module dimension | 98.0 x 60.0 x 10.0 (max.) |      |  |  |
| Viewing area     | 77.0 x 25.20              |      |  |  |
| Active area      | 58.95 x 19.15             |      |  |  |
| Dot size         | 0.54 x 0.55               | mm   |  |  |
| Dot pitch        | 0.59 x 0.60               |      |  |  |
| Mounting hole    | 93.0 x 55.0               |      |  |  |

#### **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

| ABSOLUTE MAXIMUM RATINGS    |                                    |         |                 |      |  |
|-----------------------------|------------------------------------|---------|-----------------|------|--|
| ITEM                        | SYMBOL                             | STANDAF |                 |      |  |
|                             | STIVIDUL                           | MIN.    | MAX.            | UNIT |  |
| Supply voltage<br>for logic | $V_{\text{DD}}$ to $V_{\text{SS}}$ | -0.3    | 5.3             | v    |  |
| Input voltage               | VI                                 | -0.3    | V <sub>DD</sub> |      |  |

Note

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

| ELECTRICAL CHARACTERISTICS |                                    |                          |                     |                |                     |      |
|----------------------------|------------------------------------|--------------------------|---------------------|----------------|---------------------|------|
|                            | SYMBOL                             | CONDITION                | ST                  | STANDARD VALUE |                     |      |
| ITEM                       | STMBOL                             |                          | MIN.                | TYP.           | MAX.                | UNIT |
| Supply voltage for logic   | V <sub>DD</sub> to V <sub>SS</sub> | -                        | 3.0                 | 5.0            | 5.3                 | V    |
| Input high voltage         | V <sub>IH</sub>                    | -                        | 0.9 V <sub>DD</sub> | -              | V <sub>DD</sub>     | V    |
| Input low voltage          | V <sub>IL</sub>                    | -                        | GND                 | -              | 0.1 V <sub>DD</sub> | V    |
| Output high voltage        | V <sub>OH</sub>                    | I <sub>OH</sub> = 0.5 mA | 0.8 V <sub>DD</sub> | -              | V <sub>DD</sub>     | V    |
| Output low voltage         | V <sub>OL</sub>                    | I <sub>OL</sub> = 0.5 mA | GND                 | -              | 0.2 V <sub>DD</sub> | V    |
| Supply current             | I <sub>DD</sub>                    | $V_{DD} = 5 V$           | -                   | 43             | -                   | mA   |

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

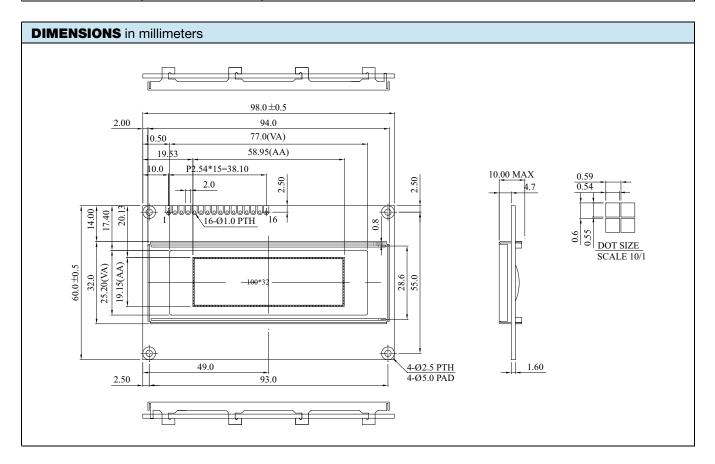


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## OLED-100H032A

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| 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/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   |  |  |



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