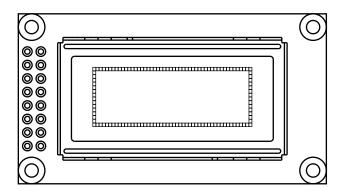
**RoHS** 

COMPLIANT



<sup>ay.com</sup> Vishay

# 50 x 16 Graphic OLED



#### **FEATURES**

• Type: Graphic

• Display format: 50 x 16 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 <a href="https://www.vishay.com/doc?99912">www.vishay.com/doc?99912</a>

MECHANICAL DATA					
ITEM	TEM STANDARD VALUE				
Module dimension	58.0 x 32.0 x 10.0 (max.)				
Viewing area	38.0 x 16.0				
Active area	29.96 x 11.16	mm			
Dot size	0.56 x 0.66	mm			
Dot pitch	0.60 x 0.70				
Mounting hole	53.0 x 27.0				

ABSOLUTE MAXIMUM RATINGS						
ITEM	SYMBOL	STANDAF	LINUT			
I I EIVI	STIVIBUL	MIN.	MAX.	UNIT		
Supply voltage for logic	V <sub>DD</sub> to V <sub>SS</sub>	-0.3	5.3	V		
Input voltage	VI	-0.3	$V_{DD}$			

#### Note

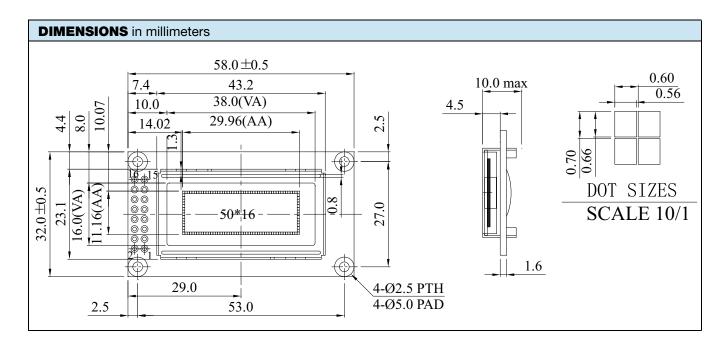
•  $V_{SS} = 0 \text{ V}, V_{DD} = 3.0 \text{ V}/5.0 \text{ V}$ 

ELECTRICAL CHARACTERISTICS						
ITCM	CYMPOL	CONDITION	STANDARD VALUE			
ITEM	SYMBOL	CONDITION	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>	-	$V_{DD}$	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>	-	$V_{DD}$	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 <sub>DD</sub> = 5 V	-	16	-	mA

OPTIONS	S								
	EN	ITTING COLO	OR				MOQ		
YELLOW	GREEN	RED	BLUE	WHITE	YELLOW	GREEN	RED	BLUE	WHITE
Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Y	Υ



INTERFACE PIN FUNCTION					
PIN NO.	SYMBOL	FUNCTION			
1	V <sub>SS</sub>	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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Vishay

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