# **OLED-020N002B**

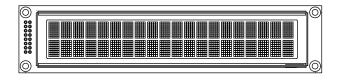


Vishay

RoHS

COMPLIANT

# 20 x 2 Character OLED



#### **FEATURES**

- Type: Character
- Display format: 20 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

MECHANICAL DATA				
ITEM	STANDARD VALUE	UNIT		
Module dimension	180.0 x 40.0 x 9.3 (max.)			
Viewing area	149.0 x 23.0			
Active area	145.08 x 20.64			
Dot size	1.12 x 1.12			
Dot pitch	1.22 x 1.22	- mm		
Mounting hole	172.0 x 32.0	1		
Character size	6.0 x 9.66			
Character pitch	7.32 x 10.98			

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	STANDAF	UNIT		
	STMIDUL	MIN.	MAX.	UNIT	
Supply voltage for logic	$V_{\text{DD}}$ to $V_{\text{SS}}$	-0.3	5.3	V	
Input voltage	VI	-0.3	$V_{DD}$		

Note

V<sub>SS</sub> = 0 V, V<sub>DD</sub> = 3.0 V/5.0 V

ELECTRICAL CHARACTERISTICS						
ІТЕМ	SYMBOL	CONDITION	STANDARD VALUE			
	STMBOL	BOL CONDITION		TYP.	MAX.	UNIT
Supply voltage for logic	$V_{DD}$ to $V_{SS}$	-	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>	$V_{DD} = 5 V$	-	30	-	mA

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

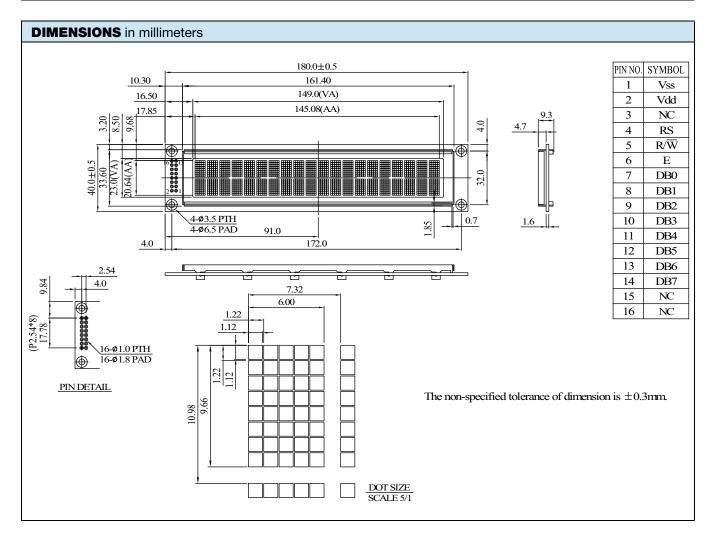


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INTERFACE PIN FUNCTION					
PIN NO.	SYMBOL	FUNCTION			
1	V <sub>SS</sub>	Ground			
2	V <sub>DD</sub>	Supply voltage for logic			
3	NC	No connection			
4	RS	H: Data; L: Instruction code			
5	R/W	H: Read (MPU $\leftarrow$ Module); L: Write (MPU $\rightarrow$ 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	NC	No connection			
16	NC	No connection			



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