LCD-016N002L1



MECHANICAL DATA

Module Dimension

Viewing Area

Mounting Hole

Character Size

Dot Size

Dot Pitch

(O)

(O)

ITEM

Vishay

16 x 2 Character LCD

 \bigcirc

0

0

0 0

 \bigcirc

UNIT

mm

STANDARD VALUE

122.0 x 44.0

99.0 x 24.0

0.92 x 1.10

0.98 x 1.16

115.0 x 37.0

4.84 x 9.66

FEATURES

- Type: Character
- Display format: 16 x 2 characters
- · Built-in controller: ST 7066 (or equivalent)
- Duty cycle: 1/16
- 5 x 8 dots includes cursor
- + 5 V power supply (also available for + 3 V)
- LED can be driven by pin 1, pin 2, pin 15, pin 16, or A and K
- Optional: smaller character size (2.95 mm x 4.35 mm)
- Optional: LCD-160H032D: Chinese version
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

ABSOLUTE MAXIMUM RATINGS								
	SYMBOL	STAN						
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT			
Power Supply	V_{DD} to V_{SS} $$ - 0.3 $$ -		-	7.0	V			
Input Voltage	VI	- 0.3	-	V_{DD}	v			

Note

V_{SS} = 0 V, V_{DD} = 5.0 V

ELECTRICAL CHARACTERISTICS									
ITEM	SYMDOL	CONDITION	STANDARD VALUE						
	SYMBOL	CONDITION	MIN. TYP.		MAX.	UNIT			
Input Voltage	V _{DD}	V _{DD} = + 5 V	4.7	5.0	5.3	V			
Supply Current	I _{DD}	V _{DD} = + 5 V	-	1.6	1.5	mA			
Recommended LC Driving Voltage for Normal Temperature Version Module		- 20 °C	-	5.2					
	V_{DD} to V_0	0 °C	-	-	4.5 -	v			
		25 °C	4.2	4.2					
		50 °C	3.8	-	-				
		70 °C	3.5	-	-	1			
LED Forward Voltage	V _F	25 °C	-	4.2	4.6	V			
LED Forward Current - Array	I _F	25 °C	-	260	520	mA			
EL Power Supply Current	I _{EL}	V _{EL} = 110 V _{AC} , 400 Hz	-	-	5.0	mA			

OPTION	S								
		PROCES	BACKLIGHT						
TN	STN GRAY	STN YELLOW	STN BLUE	FSTN B&W	STN COLOR	NONE	LED	EL	CCFL
х	х	х	х	х		х	х	х	

For detailed information, please see the "Product Numbering System" document.

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RoHS COMPLIANT

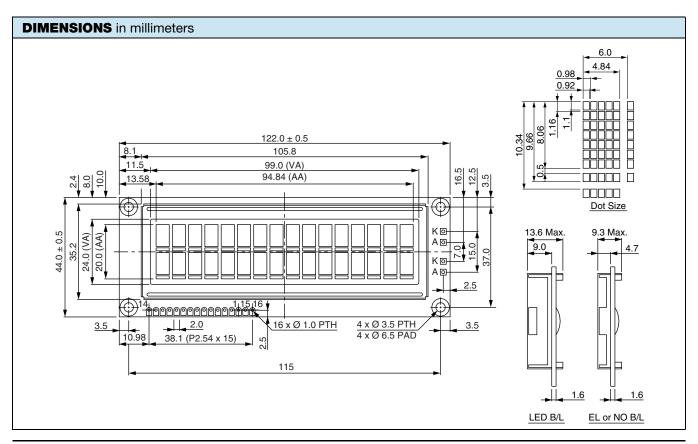


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DISPLAY CHARACTER ADDRESS CODE

Display Position																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
DD RAM Address	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
DD RAM Address	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F

INTERFACE PIN FUNCTIONS								
PIN NO.	SYMBOL	FUNCTION						
1	V _{SS}	Ground						
2	V _{DD}	+ 3 V or + 5 V						
3	V ₀	Contrast adjustment						
4	RS	H/L register select signal						
5	R/W	H/L read/write signal						
6	E	$H \rightarrow L$ enable signal						
7	DB0	H/L data bus line						
8	DB1	H/L data bus line						
9	DB2	H/L data bus line						
10	DB3	H/L data bus line						
11	DB4	H/L data bus line						
12	DB5	H/L data bus line						
13	DB6	H/L data bus line						
14	DB7	H/L data bus line						
15	A/V _{EE}	+ 4.2 V for LED ($R_A = 0 \Omega$)/negative voltage output						
16	К	Power supply for B/L (0 V)						



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2 For technical questions, contact: <u>displays@vishay.com</u> Document Number: 37423

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