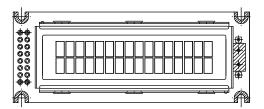
RoHS

COMPLIANT



16 x 2 Character LCD



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

• LED can be driven by pin 1, pin 2, or A and K

• N.V. optional for + 3 V power supply

• Optional: Smaller character size (2.95 mm x 4.35 mm)

• Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

MECHANICAL DATA						
STANDARD VALUE	UNIT					
85.0 x 32.6						
66.0 x 16.0						
0.56 x 0.66	mm					
0.60 x 0.70	mm					
79.0 x 25.2						
2.96 x 5.56						
	85.0 x 32.6 66.0 x 16.0 0.56 x 0.66 0.60 x 0.70 79.0 x 25.2					

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

Note

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

ELECTRICAL CHARACTERISTICS									
ITEM	OVMDOL	CONDITION	ST						
	SYMBOL	CONDITION	MIN. TYP. M		MAX.	X. UNIT			
Input Voltage	V_{DD}	V _{DD} = + 5 V	4.7	5.0	5.3	V			
Supply Current	I _{DD}	V _{DD} = + 5 V	-	1.2	1.5	mA			
Recommended LC Driving Voltage for Normal Temperature	V _{DD} to V ₀	- 20 °C	-	-	5.2	1			
		0 °C	-	-	4.2	1			
		25 °C	-	3.8	-	V			
Version Module		50 °C	3.5	-	-	7			
		70 °C	3.2	-	-				
LED Forward Voltage	V _F	25 °C	-	4.2	4.6	V			
LED Forward Current - Array		05.00	-	100	-	1			
LED Forward Current - Edge	I _F	25 °C	-	20	40	mA			
EL Power Supply Current	I _{EL}	V _{EL} = 110 V _{AC} , 400 Hz	-	-	5.0	mA			

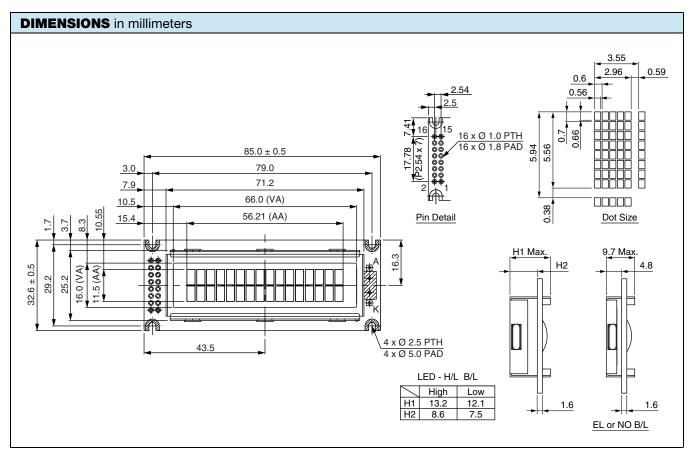
OPTIONS										
		PROCES	S COLOR				BACK	LIGHT		
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL	
х	х	х	х	х		x	х	х		

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



DISPLAY CHARACTER ADDRESS CODE															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
00	01	02	03	04	05	06	07	80	09	0A	0B	0C	0D	0E	0F
40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F
	1 00	1 2 00 01	1 2 3 00 01 02	1 2 3 4 00 01 02 03	1 2 3 4 5 00 01 02 03 04	1 2 3 4 5 6 00 01 02 03 04 05	1 2 3 4 5 6 7 00 01 02 03 04 05 06	1 2 3 4 5 6 7 8 00 01 02 03 04 05 06 07	1 2 3 4 5 6 7 8 9 00 01 02 03 04 05 06 07 08	1 2 3 4 5 6 7 8 9 10 00 01 02 03 04 05 06 07 08 09	1 2 3 4 5 6 7 8 9 10 11 00 01 02 03 04 05 06 07 08 09 0A	1 2 3 4 5 6 7 8 9 10 11 12 00 01 02 03 04 05 06 07 08 09 0A 0B	1 2 3 4 5 6 7 8 9 10 11 12 13 00 01 02 03 04 05 06 07 08 09 0A 0B 0C	1 2 3 4 5 6 7 8 9 10 11 12 13 14 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E

INTERFACE PIN FUNCTION							
PIN NO.	SYMBOL	FUNCTION					
1	V _{SS}	Ground					
2	V _{DD}	Power supply (+ 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}	Power supply for B/L					
16	К	Power supply for B/L					





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Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

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