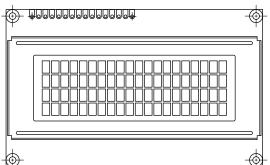


Vishay

20 x 4 Character LCD



— #	•

FEATURES

· Type: Character

• Display format: 20 x 4 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

COMPLIANT

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

• LCD-020N004B: FCC connector

• LCD-020N004F: 7 colors LED option

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

MECHANICAL DATA									
ITEM	STANDARD VALUE	UNIT							
Module Dimension	98.0 x 60.0								
Viewing Area	77.0 x 25.2								
Dot Size	0.55 x 0.55	mm							
Dot Pitch	0.60 x 0.60	111111							
Mounting Hole	93.0 x 55.0								
Character Size	2.95 x 4.75								

ABSOLUTE MAXIMUM RATINGS											
ITEM	SYMBOL	STAN	LINUT								
IIEW	STIVIDUL	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 V, V_{DD} = 5.0 V

ELECTRICAL CHARACTERISTICS										
ITEM	SYMBOL	CONDITION	ST	UNIT						
IIEW	STINIBUL	CONDITION	MIN.	TYP.	MAX.	UNIT				
Input Voltage	V_{DD}	V _{DD} = + 5 V	2.7	-	5.3	V				
Supply Current	I _{DD}	$V_{DD} = + 5 V$	-	1.0	1.2	mA				
Recommended LC Driving		- 20 °C	5.0	5.1	5.7					
Voltage for Normal Temperature	V_{DD} to V_{0}	25 °C	4.1	4.5	4.7	V				
Version Module		70 °C	3.7	3.9	4.6					
LED Forward Voltage	V _F	25 °C	-	4.2	4.6	V				
LED Forward Current - Array		25 °C	-	280	560	mA				
LED Forward Current - Edge	I _F	25 0	-	-	-	IIIA				
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		х	х	х		

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

DISPLAY CHARACTER ADDRESS CODE																				
Display Position																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DD RAM Address	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13
DD RAM Address	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51	52	53
DD RAM Address	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27
DD RAM Address	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F	60	61	62	63	64	65	66	67
DD HAW Addiess	54	55	50	57	50	00	JA	JD	30	30	JL	OI.	00	01	02	00	04	00	00	07

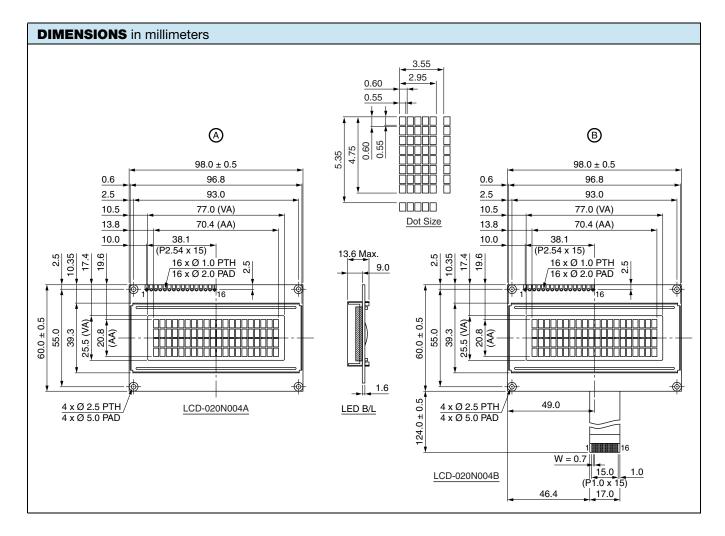
Revision: 09-Oct-12 Document Number: 37312



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INTERFACE F	INTERFACE PIN FUNCTION								
PIN NO.	SYMBOL	FUNCTION							
1	V _{SS}	Ground							
2	V _{DD}	Supply voltage for logic							
3	V ₀	Contrast adjustment							
4	RS	H: Data/L: Instruction							
5	R/W	H: Read data/L: Write data							
6	E	Enable signal							
7	DB0	Data bus line							
8	DB1	Data bus line							
9	DB2	Data bus line							
10	DB3	Data bus line							
11	DB4	Data bus line							
12	DB5	Data bus line							
13	DB6	Data bus line							
14	DB7	Data bus line							
15	A	+ 4.2 V for LED							
16	К	Power supply for B/L (-)							





Legal Disclaimer Notice

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