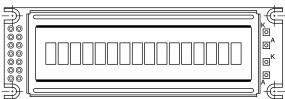
COMPLIANT



# 16 x 1 Character LCD



### **FEATURES**

Type: Character

• Display format: 16 x 1 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, pin 15, pin 16 or A and K

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

ABSOLUTE MAXIMUM RATINGS								
ITEM	SYMBOL	STAN	IDARD V	ALUE	UNIT			
IIEM	STWIDOL	MIN.	TYP.	MAX.				
Power Supply	V <sub>DD</sub> to V <sub>SS</sub>	- 0.3	-	7.0	V			
Input Voltage	$V_{I}$	- 0.3	-	$V_{DD}$	v			
Note								

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

MECHANICAL DATA							
ITEM	STANDARD VALUE	UNIT					
Module Dimension	85.0 x 28.0						
Viewing Area	66.0 x 16.0						
Dot Size	0.55 x 0.75	mm					
Dot Pitch	0.63 x 0.83	'''''					
Mounting Hole	80.0 x 23.0						
Character Size	3.07 x 6.56	]					
,	•						

ELECTRICAL CHARACTERISTICS									
ITEM	SYMBOL	CONDITION	ST	UNIT					
IIEW	STIMBOL	CONDITION	MIN.	MAX.	UNII				
Input Voltage	V <sub>DD</sub>	V <sub>DD</sub> = + 5 V	4.7	5.0	5.3	V			
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> = + 5 V	-	1.2	1.4	mA			
Recommended LC Driving		- 20 °C	4.9	5.1	5.5				
		0 °C	4.5	4.8	5.1				
Voltage for Normal Temperature	$V_{DD}$ to $V_0$	25 °C	4.1	4.5	4.7	V			
Version Module		50 °C	3.8	4.2	4.4				
		70 °C	3.5	3.9	4.1	7			
LED Forward Voltage	V <sub>F</sub>	25 °C	-	4.2	4.6	V			
LED Forward Current	I <sub>F</sub>	25 °C	-	130	260	mA			
EL Power Supply Current	I <sub>EL</sub>	V <sub>EL</sub> = 110 V <sub>AC</sub> , 400 Hz	-	-	5.0	mA			

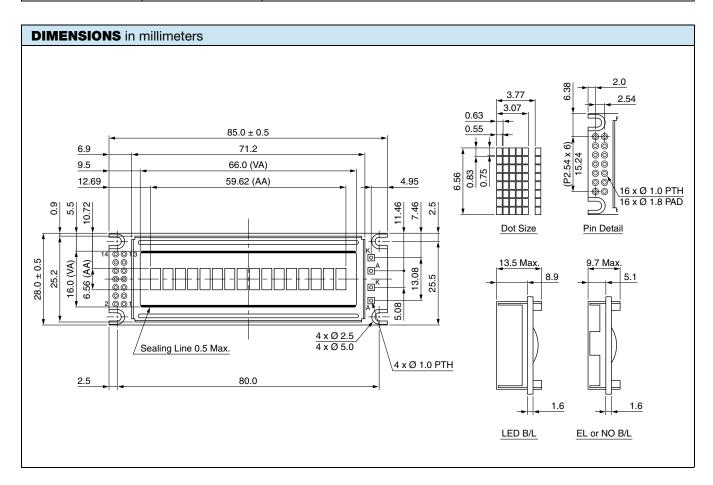
OPTIONS									
		PROCES	BACKLIGHT						
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
х	Х	х	Х	Х		Х	Х	х	

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

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	40	41	42	43	44	45	46	47



INTERFACE PIN FUNCTION							
PIN NO.	SYMBOL	FUNCTION					
1	V <sub>SS</sub>	Ground					
2	V <sub>DD</sub>	+ 5 V					
3	V <sub>0</sub>	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					





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