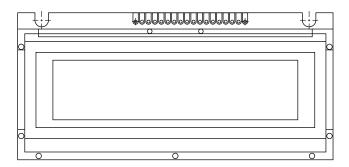
Vishay

# 122 x 32 Graphic LCD



#### **FEATURES**

• Type: graphic

Display format: 122 x 32 dotsBuilt-in controller: SBN1661G



• Duty cycle: 1/32

• Chinese version: LCD-122H032N

• Pin pitch 2.0 mm version: LCD-122H032D1

• Material categorization: for definitions of compliance

please see www.vishav.com/doc?99912

MECHANICAL DATA					
ITEM	STANDARD VALUE	UNIT			
Module dimension	59.0 x 29.3				
Viewing area	52.0 x 15.0				
Dot size	0.345 x 0.345				
Dot pitch	0.375 x 0.375	mm			
Mounting hole	50.0				
Character size	n/a				

ABSOLUTE MAXIMUM RATINGS						
ITEM	EM SYMBOL		STANDARD VALUE			
IIEWI	STIVIBUL	MIN.	TYP.	MAX.	UNIT	
Power supply	$V_{DD}$ to $V_{SS}$	2.75	5.0	5.25	V	
Input voltage	VI	0	-	$V_{DD}$	V	

#### Note

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

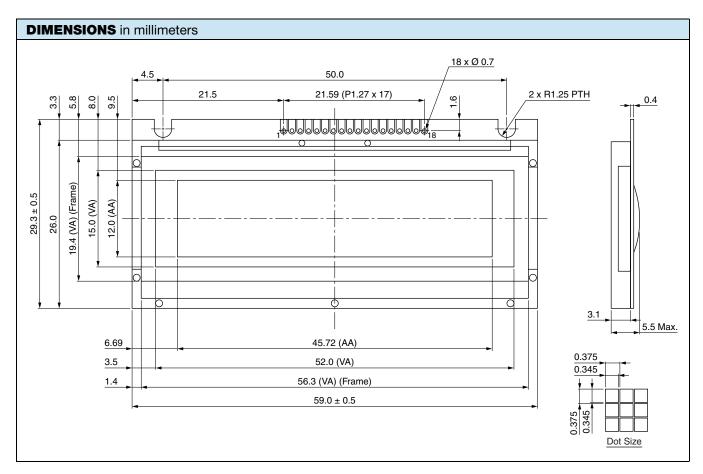
ELECTRICAL CHARACTERISTICS							
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT	
		CONDITION	MIN.	TYP.	MAX.	UNII	
Input voltage	$V_{DD}$	V <sub>DD</sub> = +5 V	4.5	5.0	5.5	V	
Supply current	I <sub>DD</sub>	$V_{DD} = +5 V$	-	1.0	1.4	mA	
Recommended LC driving voltage for normal temperature version module	V <sub>DD</sub> to V <sub>0</sub>	-20 °C	5.3	5.5	5.7		
		0 °C	5.1	5.3	5.5	V	
		25 °C	4.7	4.9	5.1		
		50 °C	4.3	4.6	4.9		
		70 °C	4.1	4.4	4.7		
LED forward voltage	V <sub>F</sub>	25 °C	-	4.2	4.6	V	
LED forward current	I <sub>F</sub>	25 °C	-	40	-	mA	
EL power supply current	I <sub>EL</sub>	V <sub>EL</sub> = 110 V <sub>AC</sub> , 400 Hz	-	-	-	mA	

OPTIONS									
PROCESS 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	-

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



INTERFACE PIN FUNCTION					
PIN NO.	SYMBOL	FUNCTION			
1	V <sub>LED</sub>	Power supply for LED backlight "-"			
2	V <sub>SS</sub>	Ground			
3	V <sub>DD</sub>	+5 V			
4	V <sub>0</sub>	Contrast adjustment			
5	A <sub>0</sub>	H: data / L: instruction			
6	E1	Chip enable for U1 (segment 1 to 61)			
7	E2	Chip enable for U1 (segment 62 to 122)			
8	DB0	Data bus line			
9	DB1	Data bus line			
10	DB2	Data bus line			
11	DB3	Data bus line			
12	DB4	Data bus line			
13	DB5	Data bus line			
14	DB6	Data bus line			
15	DB7	Data bus line			
16	R/W	H / L read / write data			
17	V <sub>EE</sub>	Negative voltage output			
18	NC	No connection			





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