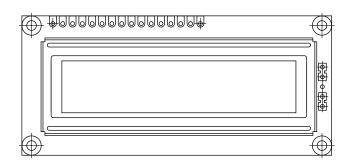


Vishay

RoHS

COMPLIANT

## 144 x 32 Graphic LCD



## FEATURES

- Type: Graphic
- Display format: 144 x 32 dots
- Built-in controller: ST7920
- Duty cycle: 1/32
- + 5 V power supply
- LED can be driven by pin 15, pin 16 or A, K
- · Chinese version
- Same size with LCD-016N002B
- Compliant to RoHS directive 2002/95/EC

MECHANICAL DATA					
ITEM	STANDARD VALUE	UNIT			
Module Dimension	80.0 x 36.0				
Viewing Area	66.0 x 16.0				
Dot Size	0.38 x 0.38				
Dot Pitch	0.42 x 0.42	mm			
Mounting Hole	75.0 x 31.0				
Character Size	N/a				

ABSOLUTE MAXIMUM RATINGS						
ITEM	SYMBOL	STAN				
	STINDUL	MIN.	TYP.	MAX.	UNIT	
Power Supply	$V_{\text{DD}}$ to $V_{\text{SS}}$	0	-	7.0	V	
Input Voltage	VI	0	-	$V_{DD}$	V	

Note

•  $V_{SS} = 0 V, V_{DD} = 5.0 V$ 

ELECTRICAL CHARACTERISTICS							
ITEM	SYMBOL	CONDITION	ST				
	STNIDUL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Input Voltage	V <sub>DD</sub>	$V_{DD} = +5 V$	4.5	5.0	5.5	V	
Supply Current	I <sub>DD</sub>	$V_{DD} = +5 V$	-	1.2	1.5	mA	
		- 20 °C	-	-	6.0	v	
Recommended LC Driving	$V_{DD}$ to $V_0$	<b>D° 0</b>	-	-	5.0		
Voltage for Normal Temperature		25 °C	-	4.7	-		
Version Module		50 °C	4.4	-	-		
		70 °C	4.0	-	-		
LED Forward Voltage	V <sub>F</sub>	25 °C	-	4.0	4.3	V	
LED Forward Current - Array				130	260		
LED Forward Current - Edge	I <sub>F</sub> 25 °C	-	20	40	— mA		

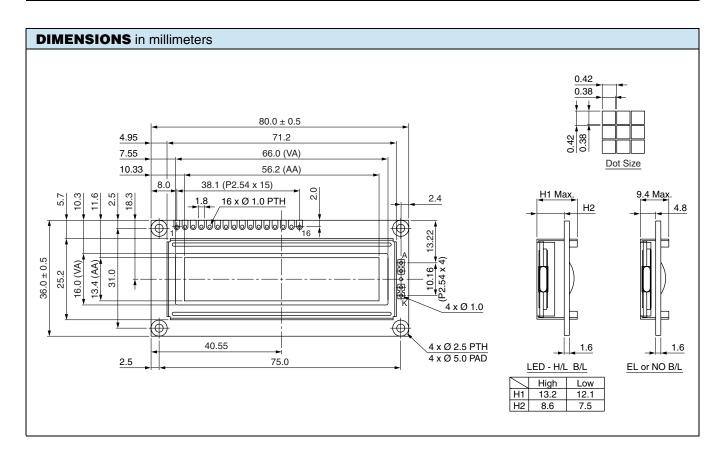
OPTIONS									
PROCESS COLOR					BACKLIGHT				
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
	х	х	х	х		х	х	х	

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

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INTERFACE PIN FUNCTION					
PIN NO.	SYMBOL	FUNCTION			
1	V <sub>SS</sub>	Ground			
2	V <sub>DD</sub>	Power supply (+ 5 V)			
3	V <sub>0</sub>	NC			
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	Power supply for B/L			
16	к	Power supply for B/L			





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