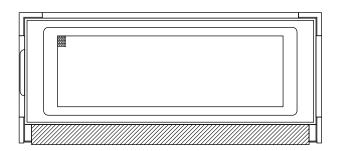
Vishay

COMPLIANT



122 x 32 Graphic LCD



FEATURES

• Type: graphic

• Display format: 122 x 32 dots

Built-in controller: SBN1661G

• Duty cycle: 1/32

• Available for internal oscillation 2 kHz

• +2.85 V to +5 V power supply

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

MECHANICAL DATA					
ITEM	STANDARD VALUE	UNIT			
Module dimension	65.4 x 28.2 x 10.5				
Viewing area	54.8 x 19.0				
Dot size	0.36 x 0.41	mm			
Dot pitch	0.40 x 0.45	1111111			
Mounting hole	n/a				
Character size	n/a				

ABSOLUTE MAXIMUM RATINGS						
ITEM	ITEM SYMBOL		STANDARD VALUE			
I I EIVI	STIVIBUL	MIN.	TYP.	MAX.	UNIT	
Power supply	V_{DD} to V_{SS}	4.75	5.0	5.25	V	
Input voltage	VI	0	-	V_{DD}] V	

Note

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

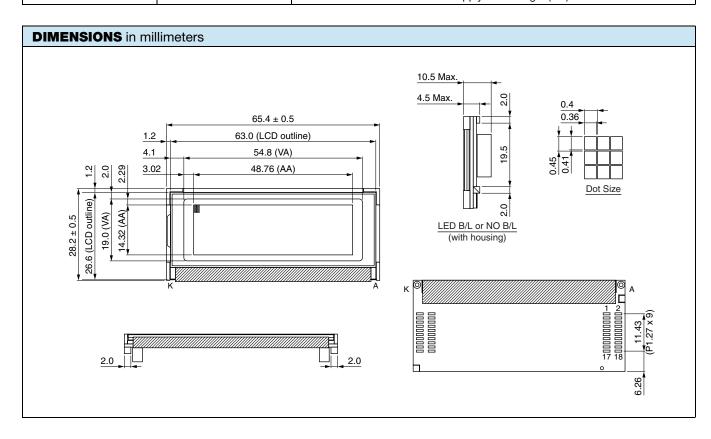
ELECTRICAL CHARACTERISTICS							
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT	
I I CIVI	STIVIBOL		MIN.	TYP.	MAX.	UNII	
Input voltage	V_{DD}	$V_{DD} = +5 \text{ V} \pm 1 \text{ V}$	4.5	5.0	5.5	V	
Supply current	I _{DD}	$V_{DD} = +5 \text{ V}$	-	1.0	1.4	mA	
	V _{DD} to V ₀	-20 °C	4.7	4.9	5.5		
Recommended LC driving voltage for normal temperature version module		0 °C	4.5	4.7	4.9	V	
		25 °C	4.3	4.5	4.7		
		50 °C	4.2	4.3	4.5		
		70 °C	4.0	4.1	4.3		
LED forward voltage	V _F	25 °C	1.7	2.1	2.5	V	
LED forward current	I _F	25 °C	-	100	200	mA	
EL power supply current	I _{EL}	V _{EL} = 110 V _{AC} , 400 Hz	-	-	5.0	mA	

OPTION	OPTIONS								
	PROCESS COLOR				BACKLIGHT				
TN	STN GRAY	STN YELLOW	STN BLUE	FSTN B&W	STN COLOR	NONE	LED	EL	CCFL
-	х	х	-	-	-	-	х	-	-

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



INTERFACE PIN FUNCTION					
PIN NO.	SYMBOL	FUNCTION			
1	V _{DD}	Supply voltage for logic ground			
2	V _{SS}	Ground			
3	V ₀	Operating voltage for LCD			
4	RES	L: reset the LCM			
5	E1	Enable chip 1			
6	E2	Enable chip 2			
7	R/W	H / L read / write data			
8	A ₀	H / L data / instruction			
9	DB0	Data bus line			
10	DB1	Data bus line			
11	DB2	Data bus line			
12	DB3	Data bus line			
13	DB4	Data bus line			
14	DB5	Data bus line			
15	DB6	Data bus line			
16	DB7	Data bus line			
17	A	+2.1 V for LED			
18	К	Power supply for backlight (0 V)			





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