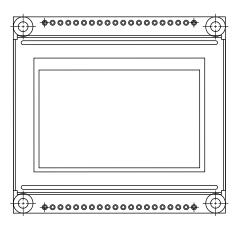
RoHS

COMPLIANT



128 x 64 Graphic LCD



FEATURES

• Type: graphic

• Display format: 128 x 64 dots and 4 icons

• Built-in controller: NT7107, NT7108

Duty cycle: 1/64+5 V power supply

• EL backlight (built-in EL inverter)

• N.V. built-in

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

MECHANICAL DATA					
ITEM	STANDARD VALUE	UNIT			
Module dimension	54.0 x 50.0 x 7.5				
Viewing area	43.5 x 29.0				
Dot size	0.28 x 0.35	mm			
Dot pitch	0.32 x 0.39	mm			
Mounting hole	49.0 x 45.0				
Character size	n/a				

ABSOLUTE MAXIMUM RATINGS						
ITEM	SYMBOL	STAN	IDARD V	UNIT		
I I EIVI	STWIDOL	MIN.	TYP.	MAX.	UNII	
Power supply	V_{DD} to V_{SS}	2.8	5.0	5.5	V	
Input voltage	VI	-0.3	-	V_{DD}		

Note

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

ELECTRICAL CHARACTERISTICS							
ITEM	SYMBOL	CONDITION	ST	UNIT			
I I EIVI	STIMBOL	CONDITION	MIN.	TYP.	MAX.	UNII	
Input voltage	V_{DD}	L level	0.7 V _{DD}	-	V_{DD}	V	
	V _{IO}	H level	0	-	0.3 V _{DD}		
Supply current	I _{DD}	$V_{DD} = +5 \text{ V}$	-	10.0	-	mA	
Recommended LC driving voltage for normal temperature version module	V _{DD} to V ₀	-20 °C	9.3	9.5	9.8		
		0 °C	9.1	9.3	9.6	V	
		25 °C	8.3	8.5	8.8		
		50 °C	7.2	7.3	7.8		
		70 °C	7.0	7.1	7.6		
EL power supply current	I _{EL}	V _{EL} = 110 V _{AC} , 400 Hz	-	-	30.0	mA	

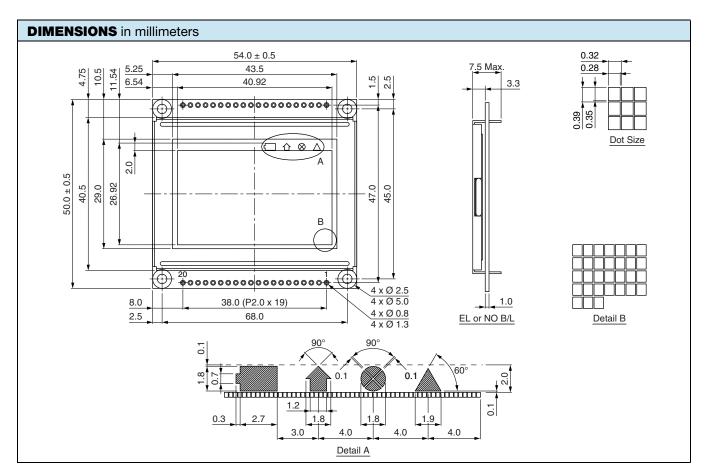
OPTIONS									
	PROCESS COLOR					BACKLIGHT			
TN	STN GRAY	STN YELLOW	STN BLUE	FSTN B&W	STN COLOR	NONE	LED	EL	CCFL
-	х	х	-	х	-	х	-	х	-

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



www.vishay.com

INTERFACE	INTERFACE PIN FUNCTION					
PIN NO.	SYMBOL	FUNCTION				
1	V _{SS}	Power supply (0 V)				
2	V_{DD}	Power supply				
3	V ₀	Power supply for LCD driver				
4	D/Ī	Register selection input / H: data / L: instruction (write) / busy flag address counter (read)				
5	R/W	Data read / write				
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	CS1	Chip enable for D2 (segment 1 to 64)				
16	CS2	Chip enable for D3 (segment 65 to 128)				
17	RST	Reset signal				
18	V _{EE}	Power supply for LCD driving				
19	BL+	Enable (on / off) for EL backlight				
20	BL-	No connection				





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