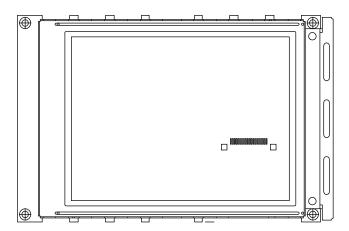
www.vishay.com

Vishay

COMPLIANT

320 x 240 Graphic LCD



FEATURES

• Type: graphic

• Display format: 320 x 240 dots

• Built-in controller: RA8835

• Duty cycle: 1/240

• Built-in N.V.

• Touch screen option (analog type)

• Temperature compensation option

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

MECHANICAL DATA					
ITEM	STANDARD VALUE	UNIT			
Module dimension	160.0 x 109.0				
Viewing area	122.0 x 92.0				
Dot size	0.34 x 0.34	mm			
Dot pitch	0.36 x 0.36	mm			
Mounting hole	152.0 x 101.0				
Character size	n/a				

ABSOLUTE MAXIMUM RATINGS						
ITEM	SYMBOL	STAN	UNIT			
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	-0.3	-	V_{DD}	1 °	

Note

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

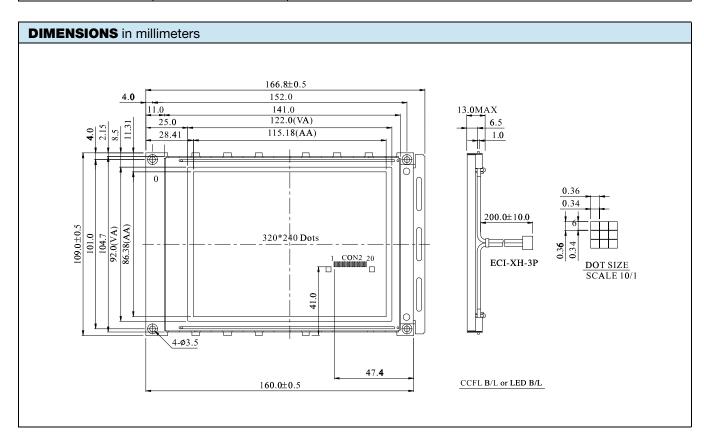
ELECTRICAL CHARACTERISTICS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
		CONDITION	MIN.	TYP.	MAX.	UNII
Input voltage	V _{DD}	L level	0.7 V _{DD}	-	V_{DD}	V
Input voltage	V _{IO}	H level	0	-	0.3 V _{DD}	V
Supply current	I _{DD}	V _{DD} = +5.0 V	-	100	105	mA
Recommended LC driving voltage for normal temperature version module	V ₀ to V _{SS}	-20 °C	-	-	26.1	
		25 °C	-	23.8	-	V
		70 °C	20.9	-	-	
CCFL starting voltage	V _{FLS}	25 °C	-	600	-	V _{RMS}
CCFL driving voltage	V_{FLD}	25 °C -		268	-	V _{RMS}
CCFL driving current	I _{FLD}	$V_{FQ} = 450 V_{RMS}, 30 \text{ kHz}$ - 5.0 -		-	mA _{RMS}	

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.



INTERFACE PIN FUNCTION						
PIN NO.	SYMBOL	FUNCTION				
1	V _{SS}	Ground				
2	V_{DD}	Power supply for logic				
3	V ₀	Driving voltage for LCD				
4	A ₀	Data type select				
5	WR	8080 family: write signal / 6800 family: R/W signal				
6	RD	8080 family: read signal / 6800 family: enable clock				
7	DB0	Date bus line				
8	DB1	Date bus line				
9	DB2	Date bus line				
10	DB3	Date bus line				
11	DB4	Date bus line				
12	DB5	Date bus line				
13	DB6	Date bus line				
14	DB7	Date bus line				
15	CS	Chip select, active L				
16	RES	Controller reset signal, active L				
17	V _{EE}	Negative voltage output				
18	SEL	8088, 6800 interface selection (1:68, 0:80)				
19	F _{GND}	Frame ground				
20	WAIT	Check busy				





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