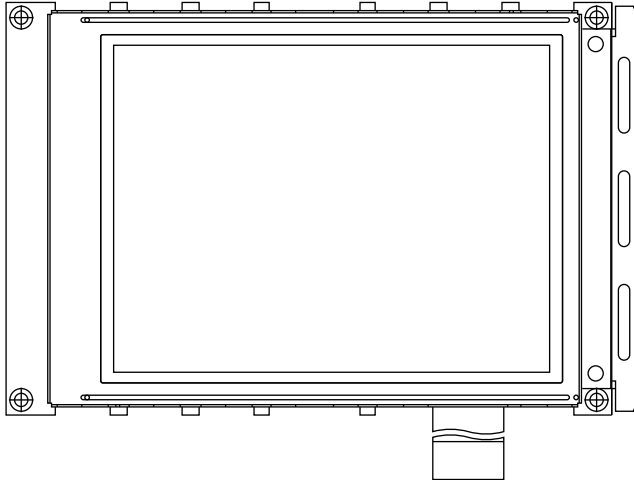


320 x 240 Graphic LCD



FEATURES

- Type: graphic
- Display format: 320 x 240 dots
- Built-in controller: none
- Duty cycle: 1/240
- +5 V power supply
- Touch screen option (analog type)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

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

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power supply	V_{DD} to V_{SS}	4.75	5.0	5.25	V
Input voltage	V_I	-0.3	-	V_{DD}	

Note

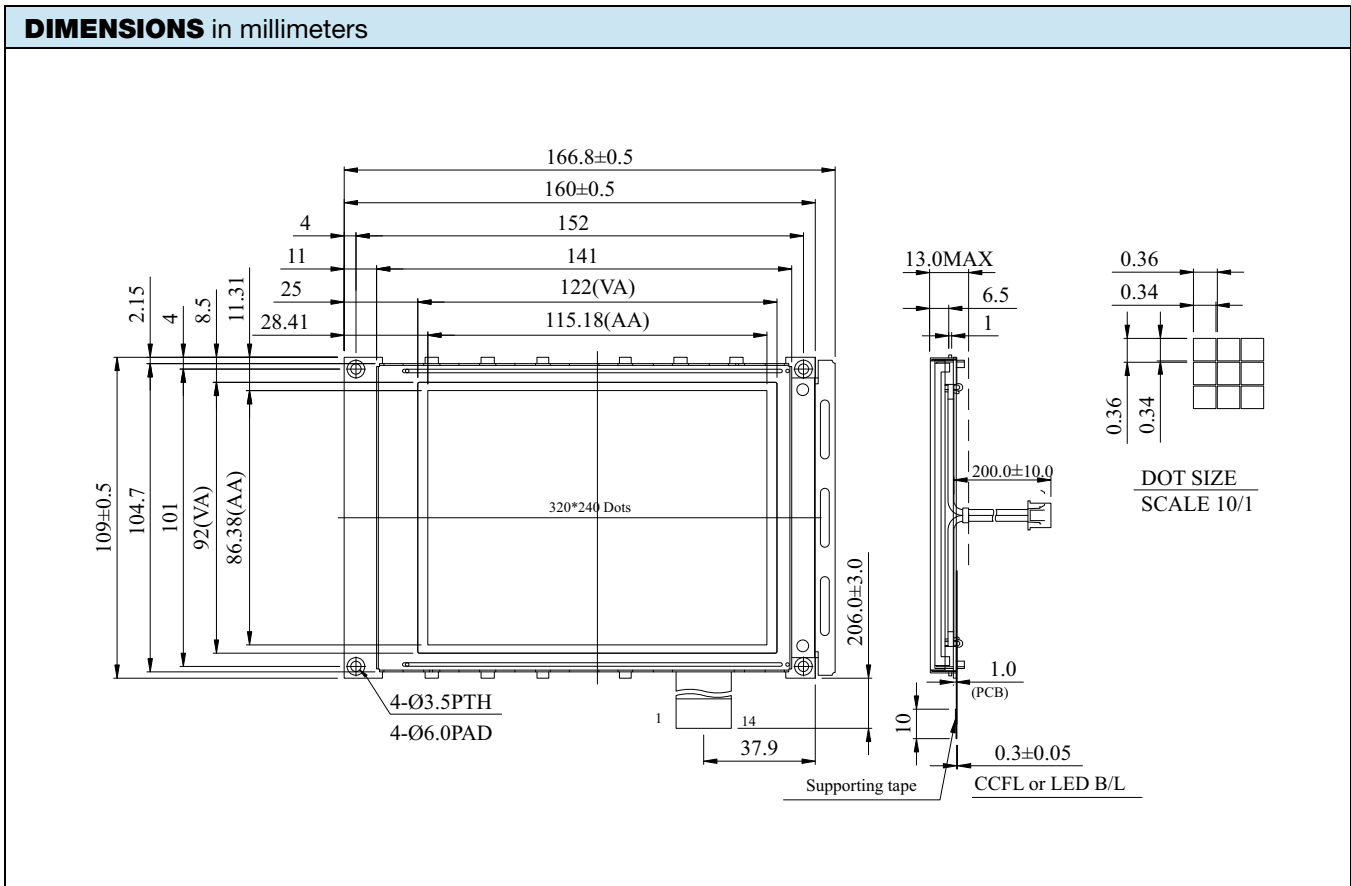
- $V_{SS} = 0$ V, $V_{DD} = 5.0$ V

ELECTRICAL CHARACTERISTICS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
Input voltage	V_{DD}	-	2.7	-	5.5	V
Supply current	I_{DD}	$V_{DD} = +5.0$ V	-	7.5	-	mA
Recommended LC driving voltage for normal temperature version module	V_0 to V_{SS}	-20 °C	-	-	26.1	V
		25 °C	-	23.8	-	
		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 kHz	-	5.0	-	mA_{RMS}
LED forward voltage	V_F	25 °C	-	4.2	4.6	V
LED forward current	I_F	25 °C	-	180	360	mA
EL power supply current	I_{EF}	$V_{EL} = 110$ V_{AC} , 400 Hz	-	-	5.0	mA

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

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

INTERFACE PIN FUNCTION		
PIN NO.	SYMBOL	FUNCTION
1	DB0	Date bus line
2	DB1	Date bus line
3	DB2	Date bus line
4	DB3	Date bus line
5	DISPOFF	H: on / L: off
6	FRAME	First line marker
7	M (NC)	Frame reverse signal (alternate signal)
8	LP	Data latch
9	CP	Data shift
10	V _{DD}	Power supply for logic
11	V _{SS}	Ground
12	V _{EE}	Power supply for LCD
13	V ₀	Operating voltage LCD driving
14	F _{GND}	Frame ground





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