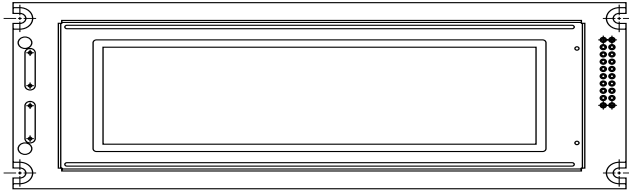# 240 x 64 Graphic LCD

FEATURES

- Type: Graphic
- Display format: 240 x 64 dots
- Built-in controller: RA8822 (or equivalent)
- Duty cycle: 1/64
- + 5 V power supply (2.7 V to 5.0 V selectable)
- Built-in N.V.
- Chinese version
- Compliant to RoHS directive 2002/95/EC

RoHS
COMPLIANT

MECHANICAL DATA

ITEM	STANDARD VALUE	UNIT
Module Dimension	180.0 x 65.0	
Viewing Area	133.0 x 39.0	
Dot Size	0.49 x 0.49	
Dot Pitch	0.53 x 0.53	mm
Mounting Hole	176.0 x 54.0	
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}	L level	$0.7 V_{DD}$	-	V_{DD}	V
	V_{IO}	H level	0	-	$0.3 V_{DD}$	
Supply Current	I_{DD}	$V_{DD} = + 5$ V	-	29.0	-	mA
Recommended LC Driving Voltage for Normal Temperature Version Module	V_{DD} to V_0	- 20 °C	13.0	13.5	14.1	V
		0 °C	12.5	13.1	13.7	
		25 °C	-	12.5	-	
		50 °C	11.1	12.2	13.0	
		70 °C	9.1	11.6	12.8	
LED Forward Voltage	V_F	25 °C	-	4.2	4.6	V
LED Forward Current	I_F	25 °C	-	450	900	mA
CCFL Forward Voltage	V_F	25 °C	-	215	650	V_{RMS}
CCFL Forward Current	I_F	25 °C	-	-	5.0	mA
EL Power Supply Current	I_{EL}	$V_{EL} = 110$ 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.

For technical questions, contact: displays@vishay.com

INTERFACE PIN FUNCTION

PIN NO.	SYMBOL	FUNCTION
1	A	Power supply for B/L
2	V_{SS}	Ground
3	V_{DD}	Power supply for logic
4	V_0	Operating voltage LCD driving
5	$\overline{WR}$	8080 family: Read signal/6800 family: Enable clock
6	$\overline{RD}$	8080 family: Write signal/6800 family: Read/write signal
7	$\overline{CE}$	Chip enable
8	$C/\overline{D}$	H: Instruction/L: Data
9	V_{EE}	Negative voltage output
10	RES	Reset
11	DB0	DB0 Data bus line
12	DB1	DB1 Data bus line
13	DB2	DB2 Data bus line
14	DB3	DB3 Data bus line
15	DB4	DB4 Data bus line
16	DB5	DB5 Data bus line
17	DB6	DB6 Data bus line
18	DB7	DB7 Data bus line
19	Busy	RA8802 statis
20	INT	Programable interrupt output

DIMENSIONS in millimeters
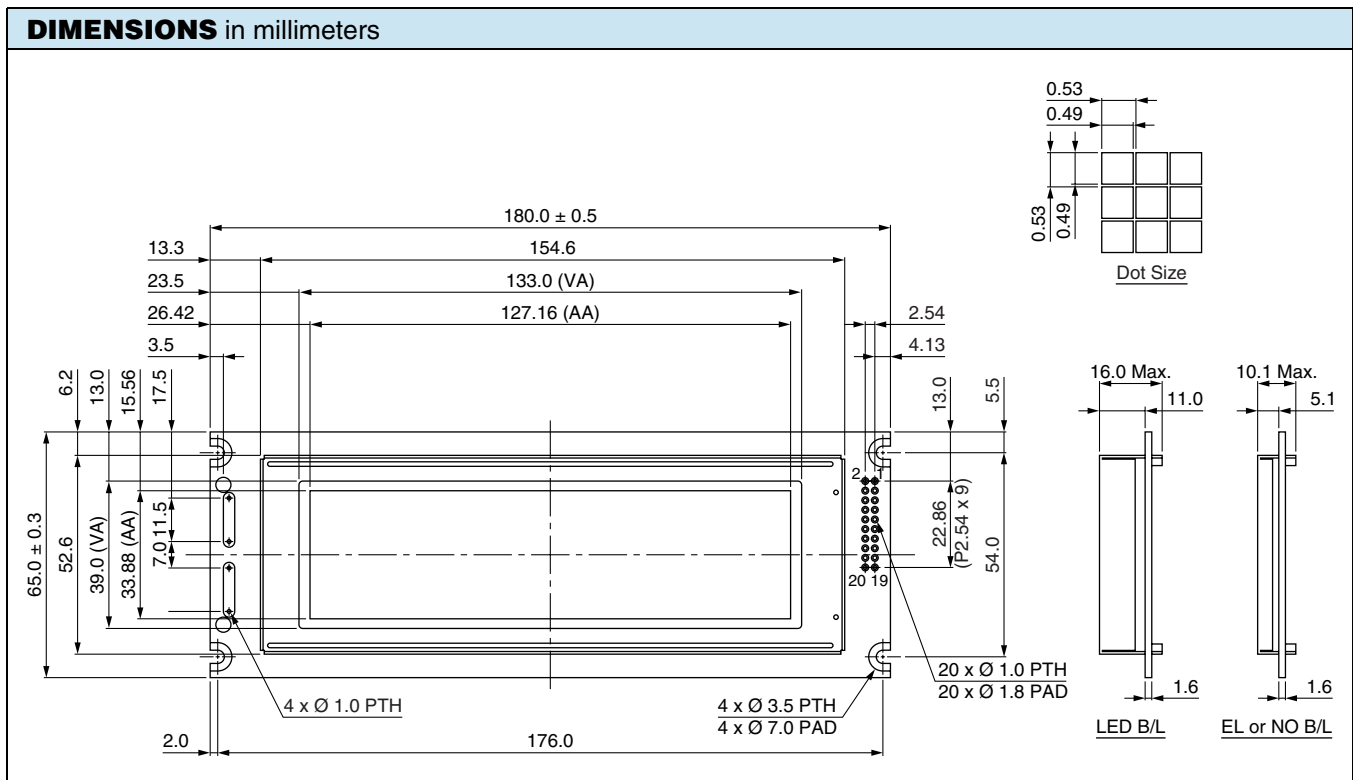
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