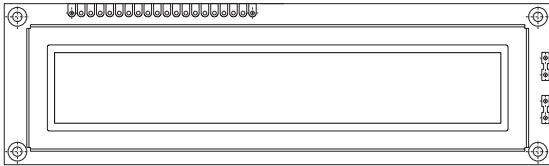


## 202 x 32 Dots Graphic LCD



### FEATURES

- Built-in oscilation
- Built-in controller (SED1520 or Equivalent)
- 1/32 duty cycle
- 2.85 - 5V power supply

MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	146.0 x 43.0	mm
Viewing Area	123.0 x 23.0	mm
Dot Size	0.57 x 0.57	mm
Dot Pitch	0.59 x 0.59	mm

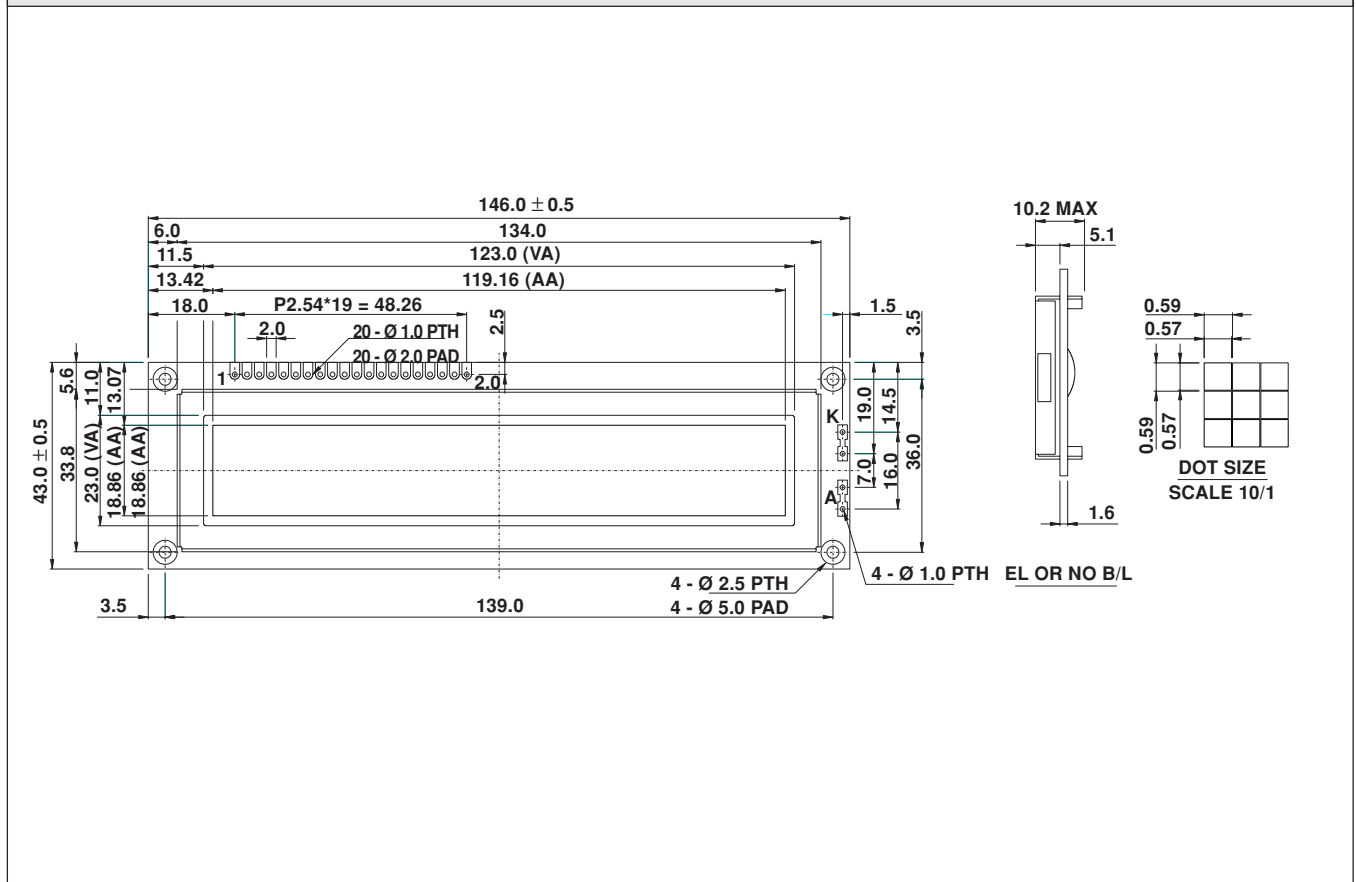
ABSOLUTE MAXIMUM RATING					
ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power Supply	VDD-VSS	- 0.3	–	8.0	V
Input Voltage	VI	- 0.3	–	VDD	V

**NOTE:** VSS = 0 Volt, VDD = 5.0 Volt

ELECTRICAL SPECIFICATIONS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
Input Voltage	VDD	VDD = 3V ± 5V	2.7	3.0	3.3	V
Supply Current	IDD	VDD = 3V	–	1.0	1.5	mA
Recommended LC Driving Voltage for Normal Temp.	VDD - V0	0°C	5.7	6.0	6.3	V
Version Module		25°C	4.6	4.7	4.8	
		50°C	3.3	3.4	3.5	
LED Forward Voltage	VF	25°C	1.7	2.1	2.5	V
LED Forward Current	IF	25°C	–	100	200	mA
El Power Supply Current	IEL	Vel = 110VAC;400Hz	–	–	5.0	mA

PIN NUMBER	SYMBOL	FUNCTION
1	Vss	GND
2	Vdd	Power Supply (+ 3V, 5V)
3	Vo	Contrast Adjustment
4	A0	RD for 80 Serial/E for 68 Serial
5	R/W	WR for 80 Serial R/W for 68 Serial
6	CS1	Enable Chip 1
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	Vee	Negative Voltage Output
16	Reset	Reset Signal
17	A	+ 4.2V for LED
18	K	Power Supply for B/L (0V)
19	CS2	Enable Chip 2
20	CS3	Enable Chip 3

## DIMENSIONS in millimeters





## Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.