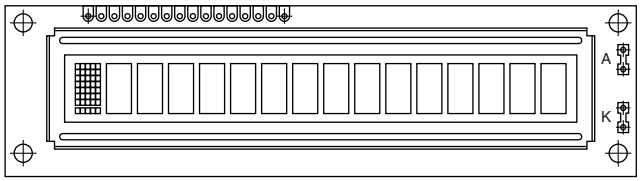
16 x 1 Character LCD



FEATURES

- Type: Character
- Display format: 16 x 1 characters
- Built-in controller: ST 7066 (or equivalent)
- Duty cycle: 1/16
- 5 x 8 dots includes cursor
- + 5 V power supply (also available for + 3 V)
- LED can be driven by pin 1, pin 2, pin 15, pin 16 or A and K
- N.V. optional for + 3 V power supply
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

MECHANICAL DATA

ITEM	STANDARD VALUE	UNIT
Module Dimension	122.0 x 33.0	mm
Viewing Area	99.0 x 13.0	
Dot Size	0.92 x 1.10	
Dot Pitch	0.98 x 1.16	
Mounting Hole	115.0 x 25.2	
Character Size	4.84 x 8.06	

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power Supply	V_{DD} to V_{SS}	- 0.3	-	7.0	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}	V_{DD} = + 5 V	4.7	5.0	5.3	V
Supply Current	I_{DD}	V_{DD} = + 5 V	-	1.2	1.4	mA
Recommended LC Driving Voltage for Normal Temperature Version Module	V_{DD} to V_0	- 20 °C	4.9	5.1	5.5	V
		0 °C	4.5	4.8	5.1	
		25 °C	4.1	4.5	4.7	
		50 °C	3.8	4.2	4.4	
		70 °C	3.5	3.9	4.1	
LED Forward Voltage	V_F	25 °C	-	4.2	4.6	V
LED Forward Current	I_F	25 °C	-	160	-	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.

DISPLAY CHARACTER ADDRESS CODE

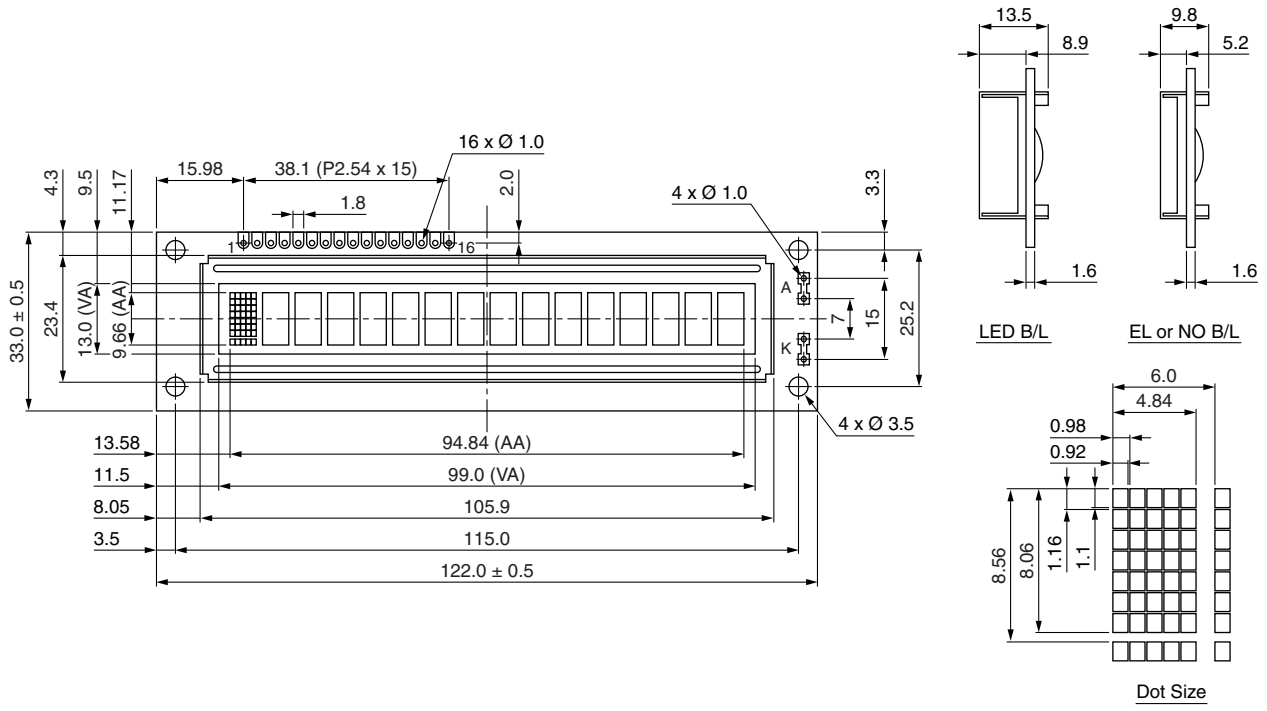
Display Position

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
DD RAM Address	00	01	02	03	04	05	06	07	40	41	42	43	44	45	46	47

INTERFACE PIN FUNCTION

PIN NO.	SYMBOL	FUNCTION
1	V_{SS}	Ground
2	V_{DD}	+ 5 V
3	V_0	Contrast adjustment
4	RS	H/L register select signal
5	R/$\overline{W}$	H/L read/write signal
6	E	H → L enable signal
7	DB0	H/L data bus line
8	DB1	H/L data bus line
9	DB2	H/L data bus line
10	DB3	H/L data bus line
11	DB4	H/L data bus line
12	DB5	H/L data bus line
13	DB6	H/L data bus line
14	DB7	H/L data bus line
15	A/V_{EE}	+ 4.2 V for LED (R_A = 0 Ω)/negative voltage output
16	K	Power supply for B/L (0 V)

DIMENSIONS in millimeters



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