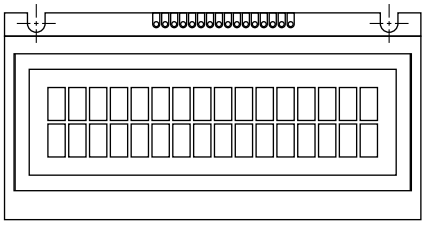
16 x 2 Character LCD



FEATURES

- Type: Character
- Display format: 16 x 2 characters
- Built-in controller: ST 7066 (or equivalent)
- Duty cycle: 1/16
- 5 x 8 dots includes cursor
- + 5 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	59.0 x 29.3	mm
Viewing Area	52.0 x 15.0	
Dot Size	0.45 x 0.54	
Dot Pitch	0.50 x 0.59	
Mounting Hole	50.0	
Character Size	2.45 x 4.67	

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	V_{SS}	-	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	4.5	5.0	5.5	V
Supply Current	I_{DD}	V_{DD} = + 5 V	-	1.2	1.5	mA
Recommended LC Driving Voltage for Normal Temperature Version Module	V_{DD} to V_0	- 20 °C	-	-	-	V
		0 °C	-	-	-	
		25 °C	-	3.8	-	
		50 °C	-	-	-	
		70 °C	-	-	-	
LED Forward Voltage	V_F	25 °C	-	4.2	-	V
LED Forward Current - Edge	I_F	25 °C	-	40	-	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.

DISPLAY CHARACTER ADDRESS CODE

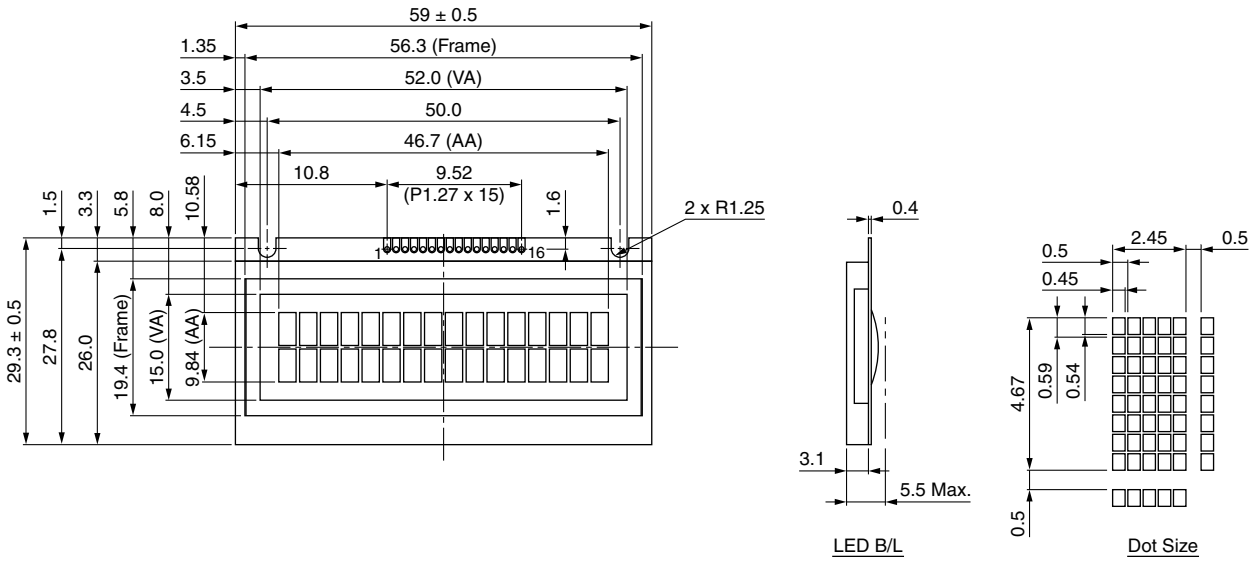
Display Position

	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	08	09	0A	0B	0C	0D	0E	0F
DD RAM Address	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F

INTERFACE PIN FUNCTION

PIN NO.	SYMBOL	FUNCTION
1	V_{LED}	Power supply for B/L(-)
2	V_{SS}	Ground
3	V_{DD}	Supply voltage for logic
4	V_0	Operation voltage for LCD
5	RS	H: Data/L: Instruction
6	R/$\overline{W}$	H/L read/write data
7	E	Chip enable signal
8	DB0	Data bit 0
9	DB1	Data bit 1
10	DB2	Data bit 2
11	DB3	Data bit 3
12	DB4	Data bit 4
13	DB5	Data bit 5
14	DB6	Data bit 6
15	DB7	Data bit 7
16	N_C/V_{EE}	NC/negative voltage output

DIMENSIONS in millimeters



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