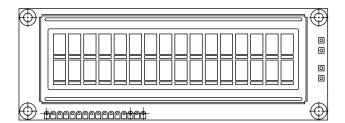


16 x 2 Character LCD



FEATURES

Type: Character

• Display format: 16 x 2 characters

• Built-in controller: ST 7066 (or equivalent)

RoHS COMPLIANT

• 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

MECHANICAL DATA							
ITEM	STANDARD VALUE	UNIT					
Module Dimension	122.0 x 44.0						
Viewing Area	99.0 x 24.0						
Dot Size	0.92 x 1.10	mm					
Dot Pitch	0.98 x 1.16	mm					
Mounting Hole	115.0 x 37.0						
Character Size	4.84 x 9.66						

ABSOLUTE MAXIMUM RATINGS								
ITEM	CVMBOL	STAN	UNIT					
IIEM	SYMBOL	MIN.	TYP.	MAX.	UNIT			
Power Supply	V _{DD} to V _{SS}	- 0.3	-	7.0	V			
Input Voltage	V_{I}	- 0.3	-	V_{DD}	v			

Note

• $V_{SS} = 0 \text{ V}, V_{DD} = 5.0 \text{ V}$

ELECTRICAL CHARACTERISTICS									
ITEM	CVMDOL	CONDITION	ST	LINUT					
IIEW	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT			
Input Voltage	V _{DD}	V _{DD} = + 5 V	4.7	5.0	5.3	V			
Supply Current	I _{DD}	V _{DD} = + 5 V	-	1.6	1.5	mA			
Recommended LC Driving		- 20 °C	-	-	5.2				
		0 °C	-	-	4.5				
Voltage for Normal Temperature	V_{DD} to V_{0}	25 °C	4.2	4.2	-	V			
Version Module		50 °C	3.8	-	-				
		70 °C	3.5	-	-	1			
LED Forward Voltage	V _F	25 °C	-	4.2	4.6	V			
LED Forward Current - Array	I _F	25 °C	-	260	520	mA			
EL Power Supply Current	I _{EL}	V _{EL} = 110 V _{AC} , 400 Hz	-	-	5.0	mA			

OPTIONS									
		PROCES		BACK	LIGHT				
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
х	Х	Х	х	Х		Х	х	Х	

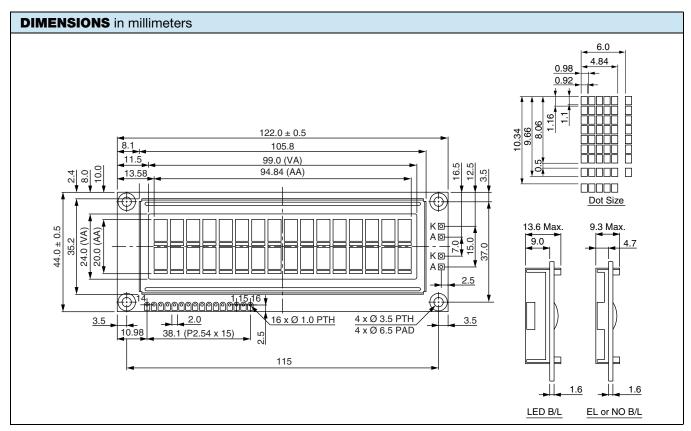
For detailed information, please see the "Product Numbering System" document.



www.vishay.com

DISPLAY CHAP	RACTI	ER AL	DRE	ss c	ODE											
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 _{SS}	Ground					
2	V _{DD}	+ 3 V or + 5 V					
3	V ₀	Contrast adjustment					
4	RS	H/L register select signal					
5	R/W	H/L read/write signal					
6	E	$ extsf{H} ightarrow extsf{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 ($R_A = 0 \Omega$)/negative voltage output					
16	K	Power supply for B/L (0 V)					





Legal Disclaimer Notice

Vishay

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

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 in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

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