

0000000

### 16 x 2 Character LCD

\_ਗ਼**ੵ 년** -|ਗ਼**ੵ 년** 

# **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

• Optional: Smaller character size (2.95 mm x 4.35 mm)

• Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

MECHANICAL DATA								
ITEM	STANDARD VALUE	UNIT						
Module Dimension	85.0 x 25.2							
Viewing Area	66.0 x 16.0							
Dot Size	0.55 x 0.65	mm						
Dot Pitch	0.60 x 0.70	mm						
Mounting Hole	80.5 x 22.0	]						
Character Size	2.95 x 5.55							

ABSOLUTE MAXIMUM RATINGS								
ITEM	CVMPOL	STAN	LINIT					
IIEW	SYMBOL	MIN.	TYP.	MAX.	UNIT			
Power Supply	V <sub>DD</sub> to V <sub>SS</sub>	- 0.3	-	7.0	V			
Input Voltage	$V_{I}$	- 0.3	ı	$V_{DD}$	v			

#### Note

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

ELECTRICAL CHARACTERISTICS								
ITEM	SYMBOL	CONDITION	ST	UNIT				
	STINIBUL	CONDITION	MIN. TYP. MAX.			JINI		
Input Voltage	$V_{DD}$	V <sub>DD</sub> = + 5 V	4.7	5.0	5.3	V		
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> = + 5 V	-	1.2	1.5	mA		
Recommended LC Driving		- 20 °C	-	=	5.2			
	V <sub>DD</sub> to V <sub>0</sub>	0 °C	-	-	4.2			
Voltage for Normal Temperature		25 °C	-	3.8	-	V		
Version Module		50 °C	3.5	-	-			
		70 °C	3.2	-	-			
LED Forward Voltage	V <sub>F</sub>	25 °C	-	4.2	4.6	V		
LED Forward Current - Array		05.00	- 1		-	^		
LED Forward Current - Edge	I <sub>F</sub>	25 °C	-	20	40	mA		
EL Power Supply Current	I <sub>EL</sub>	V <sub>EL</sub> = 110 V <sub>AC</sub> , 400 Hz	-	-	5.0	mA		

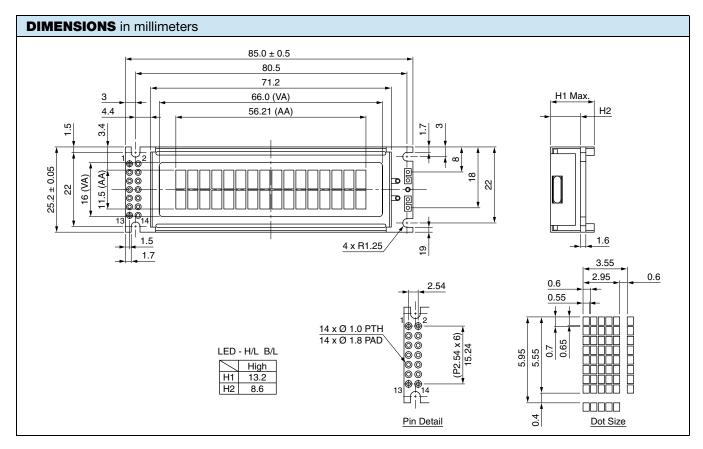
OPTIONS									
		PROCES	S COLOR		BACK	LIGHT			
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
х	х	х	х	х		х	х	х	

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



DISPLAY CHAP	RACTI	ER A	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	DB7	H/L data bus line					
2	DB6	H/L data bus line					
3	DB5	H/L data bus line					
4	DB4	H/L data bus line					
5	DB3	H/L data bus line					
6	DB2	H/L data bus line					
7	DB1	H/L data bus line					
8	DB0	H/L data bus line					
9	E	$ extsf{H}  ightarrow  extsf{L}$ enable signal					
10	R/W	H/L read/write signal					
11	RS	H/L register select signal					
12	V <sub>0</sub>	Contrast adjustment					
13	V <sub>SS</sub>	Ground					
14	V <sub>DD</sub>	Power supply (+ 5 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.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for LCD Character Display Modules & Accessories category:

Click to view products by Vishay manufacturer:

Other Similar products are found below:

HG9Z-AC501 HG9Z-SCI25B LCM-S01602DTRA-3 HG9Z-XC213 EA FL-10P MDLS-161612-G-LV-LED4G MDLS-81809-LV-GLED4G MDLS-20265-LV-GLED4G NMTC-S16205DFYHSAY-22 NHD-0420AZ-FSW-GBW-33V33-0 CM1644-SGR1 162A BC BW LCM-S02002DSM-Y 162D BA BC HDM24216H-2-P9XS DEM 16207 SYH-PY NHD-C0220BA-FSW-FTW RC0802A1-LLG-JWVE RC0802A1-LLR-JWVE RC0802A-FHW-ESX RC0802A-GHY-CSV RC1202A-BIY-CSX RC1202A-BIY-ESX RC1602A-BIW-CSV RC1602B-GHY-CSXD RC1602B-LLG-JWVE RC1602B-TIW-CSV RC1602B-YHY-CSVD RC1602D-GHY-ESX RC2002A2-LLB-JSVE RC2002A-GHG-CSV RC2004A-BIW-CSX RC2004A-BIW-ESX RC2004A-LLB-JSVE RC2004A-LLH-JSV RC2004A-LLR-JSVE DEM 08171 SYH-LY DEM 08172 SYH-PY DEM16101SYH-LY DEM 16209 SBH-PW-N DEM 16210 SGH DEM 16214 FGH-PW DEM 16215 FGH-PW DEM 16216 FDH-P(RGB)-N DEM16216SYH-LY DEM 16217 SYH-PY DEM 16221 SYH DEM 16221 SYH DEM 16221 SYH DEM 16221 SYH GFCF/TR)/V DEM 16227 FGH-PW