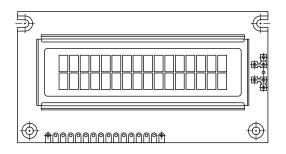


### 16 x 2 Character LCD



#### FEATURES

- Type: Character
- Display format: 16 x 2 characters
- Built-in controller: KS 0066 (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
- Optional: Smaller character size (2.95 mm x 4.35 mm)
- Compliant to RoHS directive 2002/95/EC

MECHANICAL DATA								
ITEM	STANDARD VALUE	UNIT						
Module Dimension	84.0 x 44.0							
Viewing Area	66.0 x 16.0							
Dot Size	0.55 x 0.65	mm						
Dot Pitch	0.60 x 0.70							
Mounting Hole	76.0 x 36.0							
Character Size	2.95 x 5.55							

ABSOLUTE MAXIMUM RATINGS									
ITEM	SYMBOL		STANDARD VALUE						
	STWDOL	MIN.	TYP.	MAX.	UNIT				
Power Supply	$V_{\text{DD}}$ to $V_{\text{SS}}$	- 0.3	-	7.0	v				
Input Voltage	VI	- 0.3	-	V <sub>DD</sub>	v				

Note

•  $V_{SS} = 0 V, V_{DD} = 5.0 V$ 

ELECTRICAL CHARACTERISTICS									
ITEM	SYMBOL	CONDITION	ST	UNIT					
	STWBOL	CONDITION	MIN. TYP. M		MAX.				
Input Voltage	V <sub>DD</sub>	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	1			
	$V_{DD}$ to $V_0$	0 °C	-	-	4.2				
Voltage for Normal Temperature		25 °C	-	3.8	-	V			
Version Module		50 °C 3.5 -							
		70 °C	3.2	-	-	1			
LED Forward Voltage	V <sub>F</sub>	25 °C	-	4.2	4.6	V			
LED Forward Current - Array		05.00	-	100	-				
LED Forward Current - Edge	- IF	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			

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

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



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COMPLIANT

# LCD-016N002A

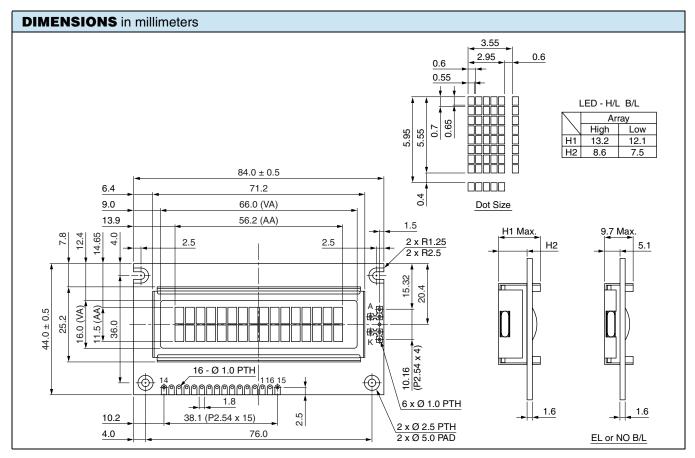
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#### 16 x 2 Character LCD



DISPLAY CHA	RAC1	ER /	DDR	ESS	COD	E										
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 BAM Address	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4F	4F

INTERFACE PIN FUNCTION								
PIN NO.	SYMBOL	FUNCTION						
1	V <sub>SS</sub>	Ground						
2	V <sub>DD</sub>	+ 3 V or + 5 V						
3	Vo	Contrast adjustment						
4	RS	H/L register select signal						
5	R/W	H/L read/write signal						
6	E	$H \rightarrow L$ 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 <sub>EE</sub>	+ 4.2 V for LED ( $R_A = 0 \Omega$ )/negative voltage output						
16	К	Power supply for B/L (0 V)						





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