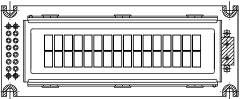




# 16 x 2 Character LCD



<b>*</b>		<u> </u>
00	║╎╶┝╫╫╫╫╫╫╫╫╫╫╫╫╫╫	
00 00 <del>00</del>		2
		B

### **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

• LED can be driven by pin 1, pin 2, 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	85.0 x 32.6					
Viewing Area	66.0 x 16.0					
Dot Size	0.56 x 0.66	mm				
Dot Pitch	0.60 x 0.70	111111				
Mounting Hole	79.0 x 25.2					
Character Size	2.96 x 5.56					

ABSOLUTE MAXIMUM RATINGS						
ITEM	SYMBOL	STAN	IDARD V	ALUE	UNIT	
I I E IVI	STWIDOL	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	-	$V_{DD}$	V	

#### Note

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

ELECTRICAL CHARACTERISTICS							
ITEM	CVMPOL	CONDITION	STANDARD VALUE			LINUT	
II EM	SYMBOL		MIN.	TYP.	MAX.	UNIT	
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	
		- 20 °C	-	-	5.2		
Recommended LC Driving	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	-	-	1	
LED Forward Voltage	V <sub>F</sub>	25 °C	-	4.2	4.6	V	
LED Forward Current - Array		25 °C	-	100	-	mA	
LED Forward Current - Edge	⊢ I <sub>F</sub>		-	20	40		
EL Power Supply Current	I <sub>EL</sub>	V <sub>EL</sub> = 110 V <sub>AC</sub> , 400 Hz	-	-	5.0	mA	

OPTION	OPTIONS								
	PROCESS 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	

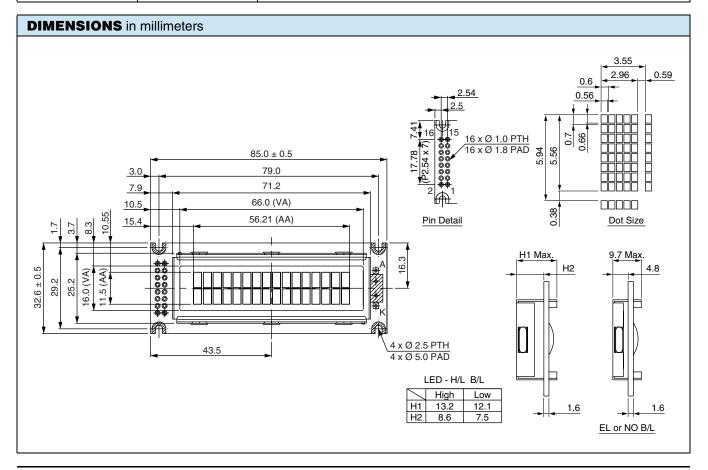
For detailed information, please see the "Product Numbering System" document.

### 16 x 2 Character LCD



Display Position   1 2 3 4 5 6 7 8 9 10 11 12 13 14   DD RAM Address 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D	Display Position
	Display Fusition
DD RAM Address 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D	
	DD RAM Address
DD RAM Address 40 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D	DD RAM Address

INTERFACE PIN FUNCTION					
PIN NO.	SYMBOL	FUNCTION			
1	V <sub>SS</sub>	Ground			
2	V <sub>DD</sub>	Power supply (+ 5 V)			
3	V <sub>0</sub>	Contrast adjustment			
4	RS	H/L register select signal			
5	R/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 <sub>EE</sub>	Power supply for B/L			
16	К	Power supply for B/L			





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