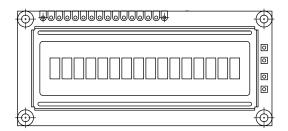


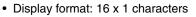


# 16 x 1 Character LCD



### **FEATURES**

• Type: Character



• 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

• Compliant to RoHS directive 2002/95/EC

MECHANICAL DATA							
ITEM	STANDARD VALUE	UNIT					
Module Dimension	80.0 x 36.0						
Viewing Area	66.0 x 16.0						
Dot Size	0.55 x 0.75	mm					
Dot Pitch	0.63 x 0.83	'''''					
Mounting Hole	75.0 x 31.0						
Character Size	3.07 x 6.56						

ABSOLUTE MAXIMUM RATING								
ITEM	SYMBOL	STAN	UNIT					
ITEW	STIVIDOL	TYP.	MAX.	UNIT				
Power Supply	$V_{DD}$ to $V_{SS}$	- 0.3	-	7.0	V			
Input Voltage	VI	- 0.3	-	$V_{DD}$	\ \			

#### Note

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

ELECTRICAL CHARACTERISTICS									
ITEM	SYMBOL	CONDITION	ST	UNIT					
IIEM	STWBOL	CONDITION	MIN.	TYP.	YP. MAX.				
Input Voltage	V <sub>DD</sub>	V <sub>DD</sub> = + 5 V	4.7	5.0	5.3	٧			
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> = + 5 V	-	1.2	1.4	mA			
Recommended LC Driving		- 20 °C	4.9	5.1	5.5				
	$V_{DD}$ to $V_{0}$	0 °C	4.5	4.8	5.1				
Voltage for Normal Temperature		25 °C	4.1	4.5	4.7	V			
Version Module		50 °C 3.8 4.2		4.2	4.4				
		70 °C	3.5	3.9	4.1				
LED Forward Voltage	V <sub>F</sub>	25 °C	-	4.2	4.6	V			
LED Forward Current	I <sub>F</sub>	25 °C	-	130	260	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											
PROCESS COLOR BACKLIGHT												
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL			
х	х	Х	х			X	х	х				

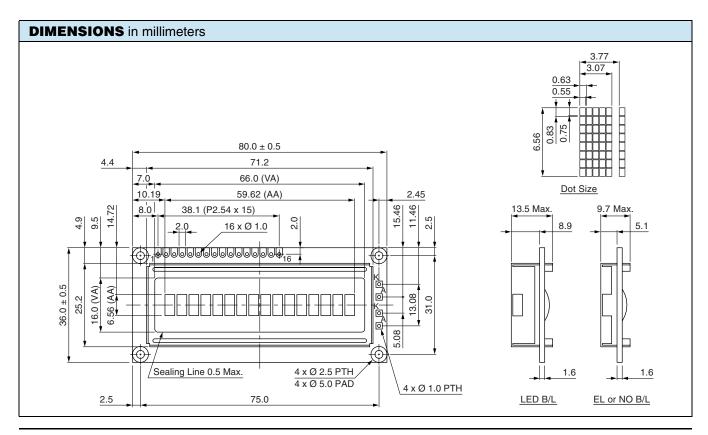
For detailed information, please see the "Product Numbering System" document.

### 16 x 1 Character LCD



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	40	41	42	43	44	45	46	47

INTERFACE	INTERFACE PIN FUNCTION							
PIN NO.	SYMBOL	FUNCTION						
1	V <sub>SS</sub>	Ground						
2	V <sub>DD</sub>	+ 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	$H \rightarrow L$ 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	+ 4.2 V for LED ( $R_A = 0 \Omega$ )						
15	К	Power supply for B/L (0 V)						







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