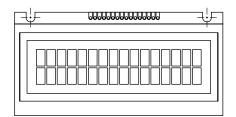




# 16 x 2 Character LCD



### **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

• Compliant to RoHS directive 2002/95/EC



MECHANICAL DATA								
ITEM	STANDARD VALUE	UNIT						
Module Dimension	59.0 x 29.3							
Viewing Area	52.0 x 15.0							
Dot Size	0.45 x 0.54	mm						
Dot Pitch	0.50 x 0.59	mm						
Mounting Hole	50.0							
Character Size	2.45 x 4.67							

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

#### Note

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

ELECTRICAL CHARACTERISTICS									
ITEM	SYMBOL	CONDITION	ST	UNIT					
I I E W	STINIBUL	CONDITION	MIN.	TYP.	MAX.	UNIT			
Input Voltage	$V_{DD}$	V <sub>DD</sub> = + 5 V	4.5	5.0	5.5	V			
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> = + 5 V	-	1.2	1.5	mA			
Recommended LC Driving		- 20 °C	-	-					
	V <sub>DD</sub> to V <sub>0</sub>	0 °C	-	-	-				
Voltage for Normal Temperature		25 °C	-	3.8	-	٧			
Version Module		50 °C	-	-	-				
		70 °C	-	=	-				
LED Forward Voltage	V <sub>F</sub>	25 °C	-	4.2	-	V			
LED Forward Current - Edge	IF	25 °C	-	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			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.

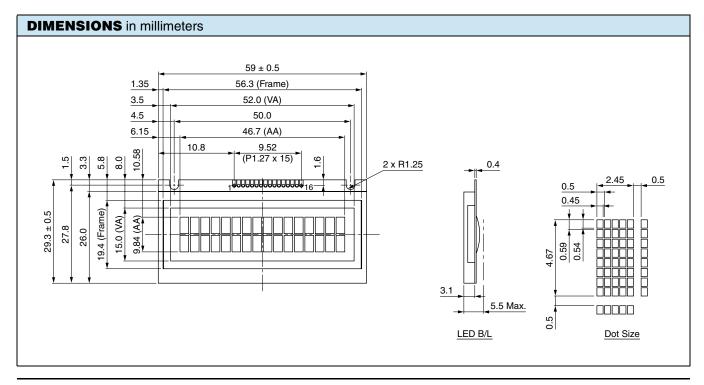
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### 16 x 2 Character LCD



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	80	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 <sub>LED</sub>	Power supply for B/L(-)					
2	V <sub>SS</sub>	Ground					
3	V <sub>DD</sub>	Supply voltage for logic					
4	V <sub>0</sub>	Operation voltage for LCD					
5	RS	H: Data/L: Instruction					
6	R/W	H/L read/write data					
7	E	Chip enable signal					
8	DB0	Data bit 0					
9	DB1	Data bit 1					
10	DB2	Data bit 2					
11	DB3	Data bit 3					
12	DB4	Data bit 4					
13	DB5	Data bit 5					
14	DB6	Data bit 6					
15	DB7	Data bit 7					
16	N <sub>C</sub> /V <sub>EE</sub>	NC/negative voltage output					



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Revision: 18-Jul-08

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