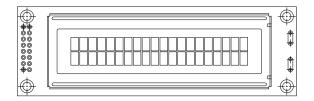




20 x 2 Character LCD



MECHANICAL DATA							
ITEM	STANDARD VALUE	UNIT					
Module Dimension	116.0 x 37.0	mm					
Viewing Area	85.0 x 18.6	mm					
Dot Size	0.6 x 0.65	mm					
Character Size	3.2 x 5.55	mm					

FEATURES

- 5 x 8 dots includes cursor
- Built-in controller (KS 0066 or Equivalent)
- + 5V power supply(Also available for + 3V)
- 1/16 duty cycle
- B/L to be driven by pin 1, pin 2 or pin 15, pin 16 or A and K (LED)
- N.V. optional for + 3V power supply

ABSOLUTE MAXIMUM RATING									
ITEM	SYMBOL	STANDARD VALUE UNI							
		MIN.	TYP.	MAX.					
Power Supply	VDD-VSS	- 0.3	_	7.0	V				
Input Voltage	VI	- 0.3	_	VDD	V				

NOTE: VSS = 0 Volt, VDD = 5.0 Volt

ELECTRICAL SPECIFICATIONS									
ITEM	SYMBOL	CONDITION	ST	UNIT					
			MIN.	TYP.	MAX.				
Input Voltage	VDD	VDD = + 5V	4.7	5.0	5.3	V			
		VDD = + 3V	2.7	3.0	5.3	V			
Supply Current	IDD	VDD = + 5V	_	1.0	1.2	mA			
		- 20 °C	5.0	5.1	5.7				
Recommended LC Driving	VDD - V0	0°C	4.6	4.8	5.2				
Voltage for Normal Temp.		25°C	4.1	4.5	4.7	V			
Version Module		50°C	3.9	4.2	4.5				
		70°C	3.7	3.9	4.3				
LED Forward Voltage	VF	25°C	_	4.2	4.6	V			
LED Forward Current	IF	25°C	_	210	420	mA			
EL Power Supply Current	IEL	Vel = 110VAC;400Hz	_	_	5.0	mA			

DISPLAY CH	ISPLAY CHARACTER ADDRESS CODE:															
Display Position	1	2	3	4	5	6	7	8	9	10	11	12	13	_	_	20
DD RAM Address	00	01														13
DD RAM Address	40	41														53

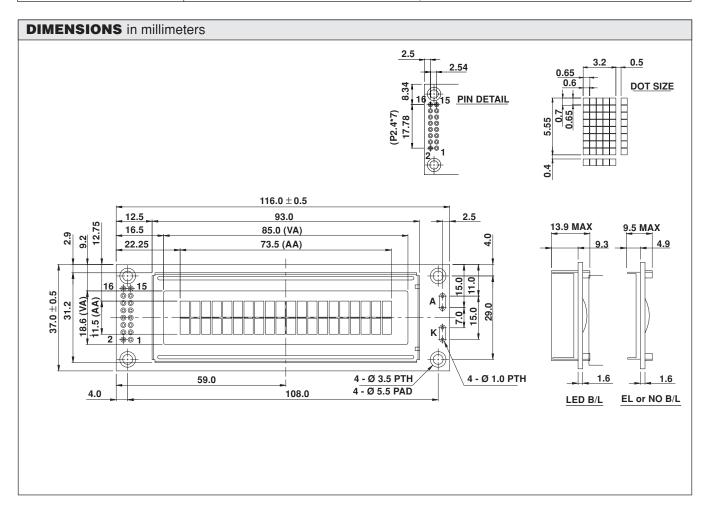
LCD-020M002A

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16 x 2 Character LCD



PIN NUMBER	SYMBOL	FUNCTION			
1	Vss	GND			
2	Vdd	+ 3V or + 5V			
3	Vo	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/Vee	+ 4.2V for LED/Negative Voltage Potput			
16	К	Power Supply for B/L (OV)			





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