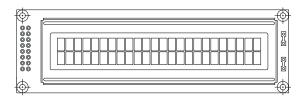




24 x 2 Character LCD



MECHANICAL DATA							
ITEM	STANDARD VALUE	UNIT					
Module Dimension	118.0 x 36.0	mm					
Viewing Area	94.5 x 16.0	mm					
Dot Size	0.6 x 0.65	mm					
Character Size	3.2 x 5.55	mm					

FEATURES

- 5 x 8 dots with 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 UN							
		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	SI	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	_	0.8	1.1	mA		
		- 20 °C	5.1	5.3	5.7			
Recommended LC Driving	VDD - V0	0°C	4.6	4.9	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	_	190	380	mA		
EL Power Supply Current	IEL	Vel = 110VAC;400Hz	_	_	5.0	mA		

DISPLAY CH	ARAC	TER A	ADDF	RESS	S CC	DE:										
Display Position	1	2	3	4	5	6	7	8	9	10	11	12	_	_	_	24
DD RAM Address	00	01														17
DD RAM Address	40	41														57

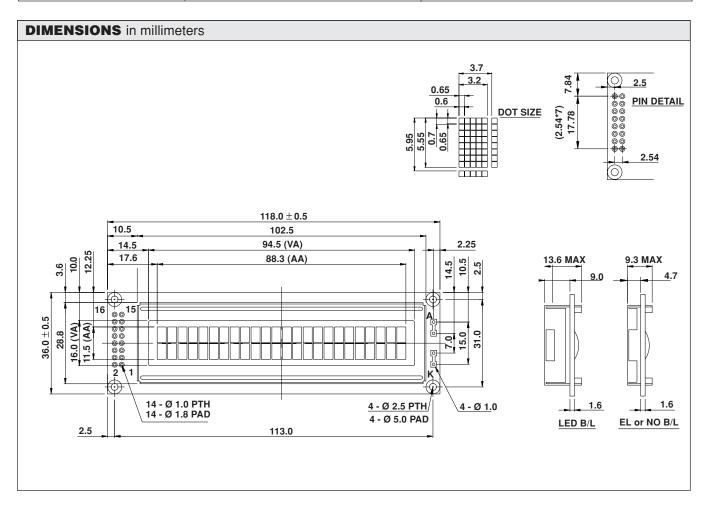
LCD-024M002A

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24 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	+ 4.2 for LED/Negative Voltage Output					
16	К	Power Supply for B/L (0V)					





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