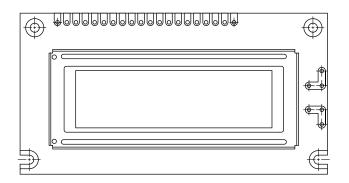


# 122 x 32 Graphic LCD



### **FEATURES**

• Type: Graphic

Display format: 122 x 32 dotsBuilt-in controller: ST7920

Duty cycle: 1/32Chinese version

• Same size with LCD-122H032A

• Compliant to RoHS directive 2002/95/EC



MECHANICAL DATA				
ITEM	STANDARD VALUE	UNIT		
Module Dimension	84.0 x 44.0			
Viewing Area	60.0 x 18.0			
Dot Size	0.40 x 0.45			
Dot Pitch	0.44 x 0.49	mm		
Mounting Hole	79.0 x 36.0	0 x 36.0		
Character Size	N/a			

ABSOLUTE MAXIMUM RATINGS						
ITEM	SYMBOL	STAN	UNIT			
I I E IVI	STIVIBUL	MIN.	TYP.	MAX.	UNIT	
Power Supply	V <sub>DD</sub> to V <sub>SS</sub>	0	-	7.0	V	
Input Voltage	VI	0	-	$V_{DD}$	V	

#### Note

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

ELECTRICAL CHARACTERISTICS							
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT	
HEW	STWIBOL		MIN.	TYP.	MAX.	UNIT	
Input Voltage	$V_{DD}$	-	4.5	5.0	5.5	V	
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> = + 5 V	1.2	1.4	1.8	mA	
Recommended LC Driving Voltage for Normal Temperature		- 20 °C	=	=	5.2		
	$V_{DD}$ to $V_0$	25 °C	=	4.4	-	V	
Version Module		70 °C	3.7	=	-		
CCFL Starting Voltage	V <sub>FLS</sub>	25 °C	=	=	-	V <sub>RMS</sub>	
CCFL Driving Voltage	V <sub>FLD</sub>	25 °C	=	=	-	V <sub>RMS</sub>	
CCFL Driving Current	I <sub>FLD</sub>	$V_{FQ} = 450 V_{RMS}$ , 30 kHz	=	=	-	mA <sub>RMS</sub>	
LED Forward Voltage	V <sub>F</sub>	25 °C	4.0	4.2	4.4	V	
LED Forward Current	I <sub>F</sub>	25 °C	90	120	180	mA	
EL Power Supply Current	I <sub>EF</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		Х	х	х	

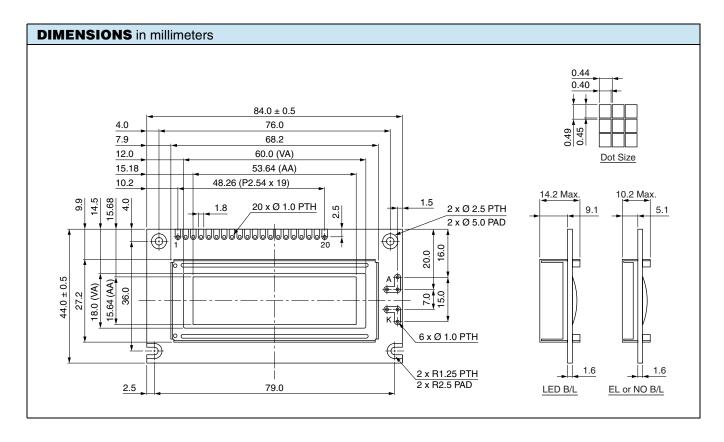
For detailed information, please see the "Product Numbering System" document.

Document Number: 37326 Revision: 04-Nov-08

## 122 x 32 Graphic LCD



INTERFACE PIN FUNCTION					
PIN NO.	SYMBOL	FUNCTION			
1	V <sub>SS</sub>	Ground			
2	V <sub>DD</sub>	Supply voltage for logic			
3	V <sub>0</sub>	Operating voltage for LCD			
4	RS	H/L register select signal			
5	V <sub>OUT</sub>	Positive voltage output			
6	NC	NC			
7	NC	NC			
8	E	Enable signal			
9	R/W	H: Read data/L: Write data			
10	DB0	Data bus line			
11	DB1	Data bus line			
12	DB2	Data bus line			
13	DB3	Data bus line			
14	DB4	Data bus line			
15	DB5	Data bus line			
16	DB6	Data bus line			
17	DB7	Data bus line			
18	RES	L: Reset the LCM			
19	A	Power supply for B/L (+)			
20	К	Power supply for B/L (-)			





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