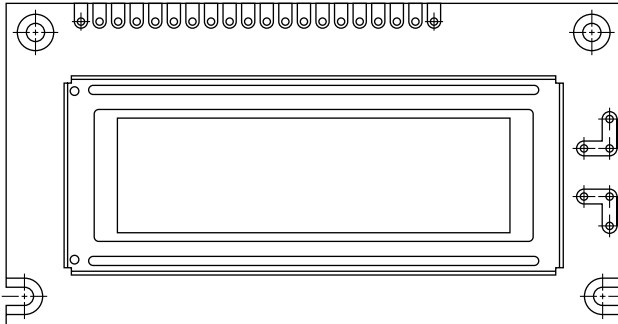


## 122 x 32 Graphic LCD



### FEATURES

- Type: Graphic
- Display format: 122 x 32 dots
- Built-in controller: ST7920
- Duty cycle: 1/32
- Chinese version
- Same size with LCD-122H032A
- Compliant to RoHS directive 2002/95/EC


**RoHS**  
COMPLIANT

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

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power Supply	$V_{DD}$ to $V_{SS}$	0	-	7.0	V
Input Voltage	$V_I$	0	-	$V_{DD}$	

#### Note

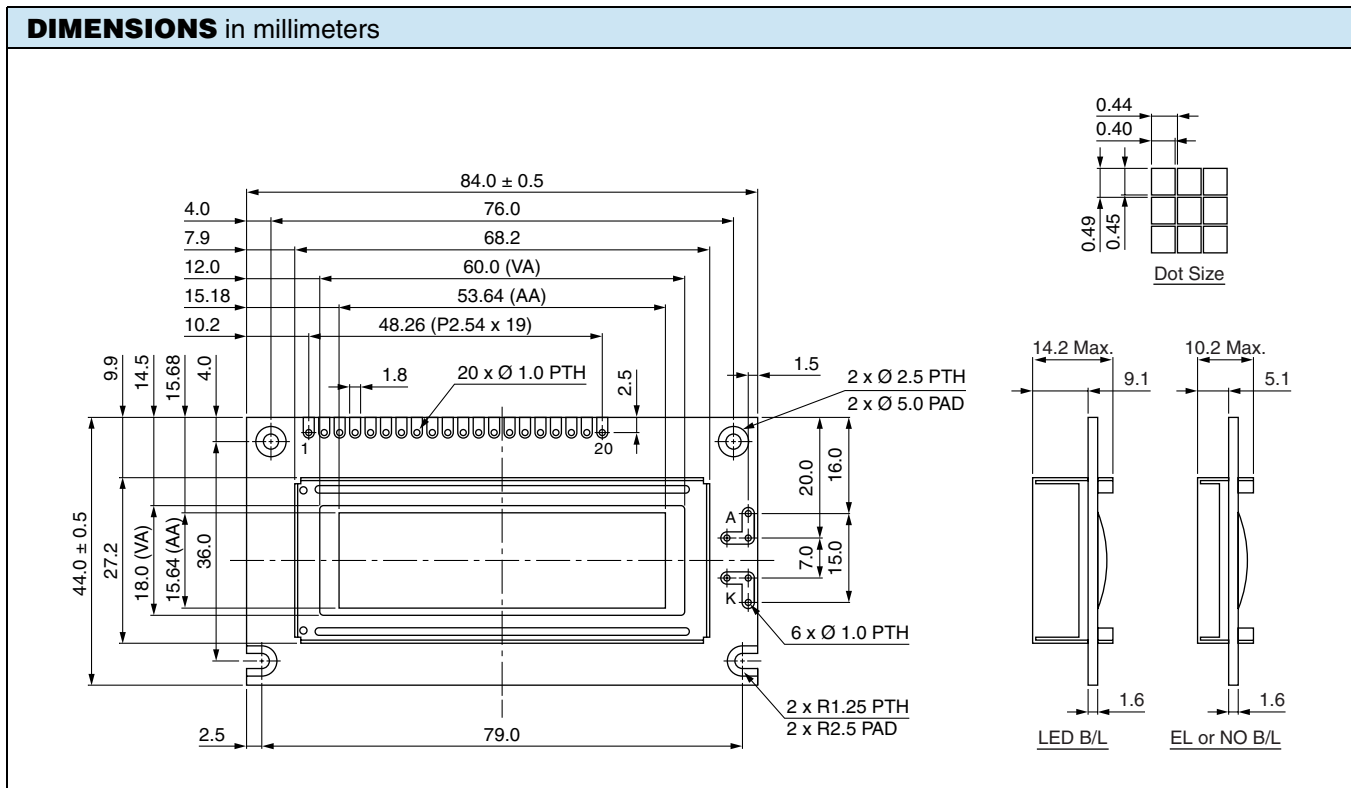
- $V_{SS} = 0$  V,  $V_{DD} = 5.0$  V

ELECTRICAL CHARACTERISTICS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
Input Voltage	$V_{DD}$	-	4.5	5.0	5.5	V
Supply Current	$I_{DD}$	$V_{DD} = +5$ V	1.2	1.4	1.8	mA
Recommended LC Driving Voltage for Normal Temperature Version Module	$V_{DD}$ to $V_0$	- 20 °C	-	-	5.2	V
		25 °C	-	4.4	-	
		70 °C	3.7	-	-	
CCFL Starting Voltage	$V_{FLS}$	25 °C	-	-	-	$V_{RMS}$
CCFL Driving Voltage	$V_{FLD}$	25 °C	-	-	-	$V_{RMS}$
CCFL Driving Current	$I_{FLD}$	$V_{FQ} = 450 V_{RMS}, 30$ kHz	-	-	-	$mA_{RMS}$
LED Forward Voltage	$V_F$	25 °C	4.0	4.2	4.4	V
LED Forward Current	$I_F$	25 °C	90	120	180	mA
EL Power Supply Current	$I_{EF}$	$V_{EL} = 110 V_{AC}, 400$ Hz	-	-	5.0	mA

OPTIONS									
PROCESS COLOR						BACKLIGHT			
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
	x	x	x	x		x	x	x	

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

INTERFACE PIN FUNCTION			
PIN NO.	SYMBOL	PIN NO.	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/ $\bar{W}$		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	$\bar{RES}$		L: Reset the LCM
19	A		Power supply for B/L (+)
20	K		Power supply for B/L (-)





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