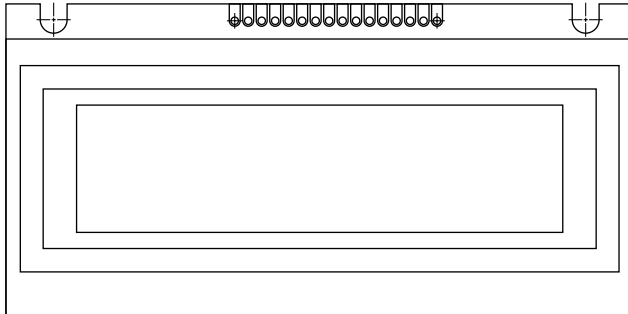


## 122 x 32 Graphic LCD



### FEATURES

- Type: Graphic
- Display format: 122 x 32 dots
- Built-in controller: ST7920
- Duty cycle: 1/32
- N.V. optional for + 3 V power supply
- Chinese version
- Same size with LCD-122H032D
- Compliant to RoHS directive 2002/95/EC


**RoHS**  
COMPLIANT

MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	59.0 x 29.3 x 5.5	mm
Viewing Area	52.0 x 15.0	
Dot Size	0.345 x 0.345	
Dot Pitch	0.375 x 0.375	
Mounting Hole	50.0	
Character Size	N/a	

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power Supply	$V_{DD}$ to $V_{SS}$	4.75	5.0	5.25	V
Input Voltage	$V_I$	0	-	$V_{DD}$	

**Note**

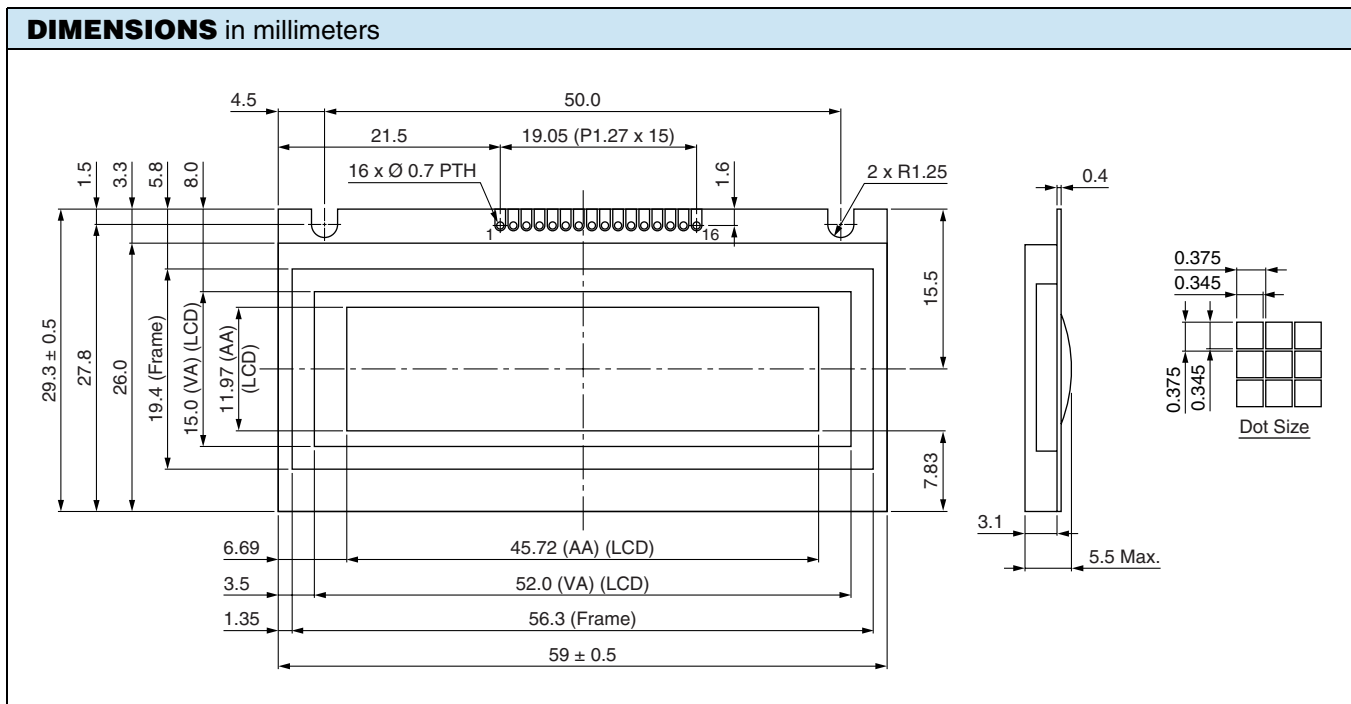
- $V_{SS} = 0$  V,  $V_{DD} = 5.0$  V

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	0.8	1.0	1.5	mA
Recommended LC Driving Voltage for Normal Temperature Version Module	$V_{DD}$ to $V_0$	- 20 °C	-	-	5.8	V
		25 °C	-	4.0	-	
		70 °C	3.2	-	-	
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	30	40	60	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	

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

INTERFACE PIN FUNCTION			
PIN NO.	SYMBOL		FUNCTION
1	$\bar{V}_{LED}$		B/L selected
2	$V_{SS}$		Ground
3	$V_{DD}$		Supply voltage for logic
4	$V_0$		Operating voltage for LCD
5	RS		H: Date/L: Instruction
6	E		Enable signal
7	$V_{OUT}$		Positive voltage output
8	DB0		Data bus line
9	DB1		Data bus line
10	DB2		Data bus line
11	DB3		Data bus line
12	DB4		Data bus line
13	DB5		Data bus line
14	DB6		Data bus line
15	DB7		Data bus line
16	R/ $\bar{W}$		H: Read data/L: Write data





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