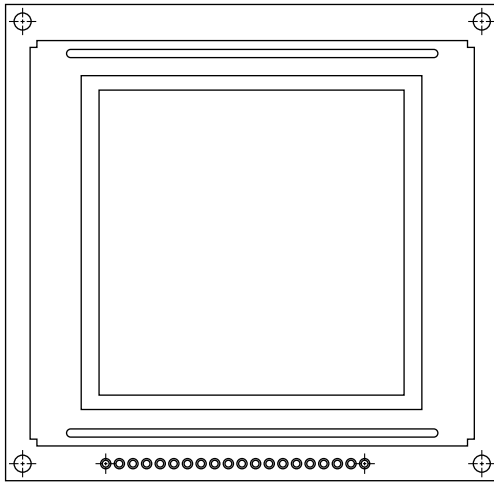


# 128 x 128 Graphic LCD


**FEATURES**

- Type: Graphic
- Display format: 128 x 128 dots
- Built-in controller: Sanyo LC7981
- Duty cycle: 1/128
- + 5 V power supply
- Compliant to RoHS directive 2002/95/EC


**RoHS**  
COMPLIANT

MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	72.5 x 69.9	mm
Viewing Area	50.0 x 49.0	
Dot Size	0.32 x 0.32	
Dot Pitch	0.35 x 0.35	
Mounting Hole	67.4 x 64.9	
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	$V_I$	- 0.3	-	$V_{DD}$	

**Note**

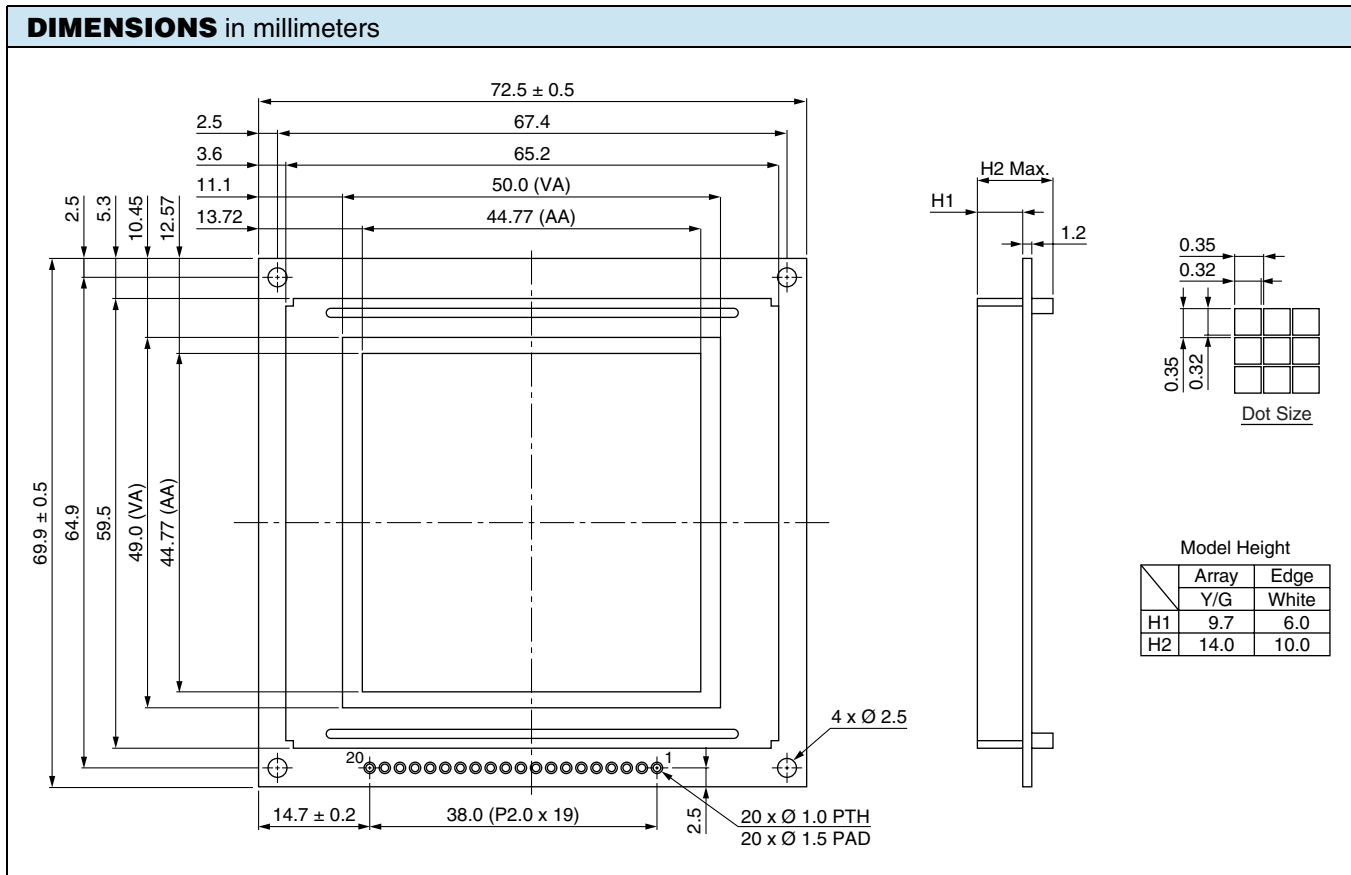
- $V_{SS} = 0$  V,  $V_{DD} = 5.0$  V

ELECTRICAL CHARACTERISTICS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
Input Voltage	$V_{DD}$	L level	$0.7 V_{DD}$	-	$V_{DD}$	V
	$V_{IO}$	H level	-	-	$0.3 V_{DD}$	V
Supply Current	$I_{DD}$	$V_{DD} = +5$ V	-	1.5	-	mA
Recommended LC Driving Voltage for Normal Temperature Version Module	$V_{DD}$ to $V_0$	- 20 °C	-	18.0	-	V
		0 °C	-	17.5	-	
		25 °C	-	17.0	-	
		50 °C	-	16.0	-	
		70 °C	-	15.5	-	
LED Forward Voltage	$V_F$	25 °C	-	4.2	4.6	V
LED Forward Current	$I_F$	25 °C	-	-	-	mA
EL Power Supply Current	$I_{EL}$	$V_{EL} = 110$ V <sub>AC</sub> , 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	DB0	Data bus line
2	DB1	Data bus line
3	DB2	Data bus line
4	DB3	Data bus line
5	DB4	Data bus line
6	DB5	Data bus line
7	DB6	Data bus line
8	DB7	Data bus line
9	RS	Data/instruction select
10	R/W	Date read/write
11	E	Enable select
12	CS	Chip select
13	RES	Reset signal
14	V <sub>0</sub>	Contrast adjustment
15	V <sub>DD</sub>	Power supply (+ 5 V)
16	V <sub>SS</sub>	Power supply (ground)
17	V <sub>EE</sub>	Negative voltage output
18	Dispoff	No connection
19	LED (+)	Power supply for LED B/L (+ 4.2 V)
20	LED (-)	Power supply for LED B/L (0 V)





## Disclaimer

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