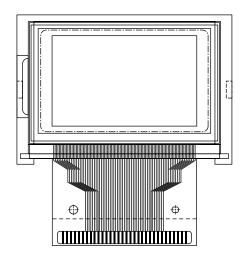




# 128 x 64 Graphic LCD



### **FEATURES**

• Type: Graphic

• Display format: 128 x 64 dots

• Built-in controller: Sitronix ST7565P-F3

• Duty cycle: 1/64

• + 3.3 V power supply only

• Compliant to RoHS directive 2002/95/EC



MECHANICAL DATA					
ITEM	STANDARD VALUE	UNIT			
Module Dimension	38.0 x 26.4				
Viewing Area	29.58 x 17.98				
Dot Size	0.18 x 0.23				
Dot Pitch	0.20 x 0.25	mm			
Mounting Hole	N/a				
Character Size	N/a				

ABSOLUTE MAXIMUM RATINGS						
ITEM	SYMBOL	STAN	LINUT			
I I E IVI	STIVIBUL	MIN.	TYP.	MAX.	UNIT	
Power Supply	V <sub>DD</sub> to V <sub>SS</sub>	2.4	-	5.5	V	
Input Voltage	VI	- 0.3	-	$V_{DD}$	V	

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

ELECTRICAL CHARACTERISTICS							
ITEM	SYMBOL	CONDITION	STANDARD VALUE			LINUT	
I I EW	STWIBUL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Input Voltage	$V_{DD}$	L level	0.8 V <sub>DD</sub>	=	$V_{DD}$	V	
input voitage	V <sub>IO</sub>	H level	-	-	-	_ v	
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> = + 5 V	-	=	-	mA	
	V <sub>DD</sub> to V <sub>0</sub>	- 20 °C	9.5	10	10.5		
Recommended LC Driving		0 °C	9.3	9.8	10.3	V	
Voltage for Normal Temperature		25 °C	7.9	8.4	8.9		
Version Module		50 °C	7.0	7.5	8.0		
		70 °C	6.8	7.3	7.8	1	
LED Forward Voltage	V <sub>F</sub>	25 °C	-	-	-	V	
LED Forward Current	l <sub>F</sub>	25 °C	-	=	-	mA	
EL Power Supply Current	I <sub>EL</sub>	V <sub>EL</sub> = 110 V <sub>AC</sub> , 400 Hz	-	-	-	mA	

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	

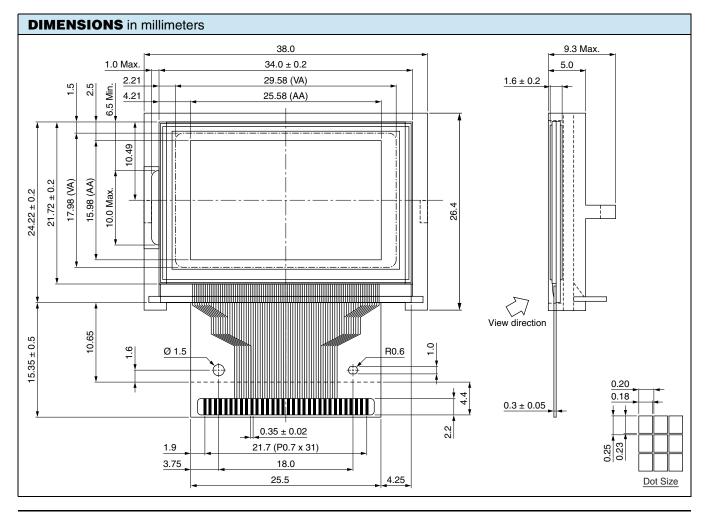
For detailed information, please see the "Product Numbering System" document.

Document Number: 37341 Revision: 16-Mar-09

## 128 x 64 Graphic LCD



INTERFACE PIN FUNCTION						
PIN NO.	SYMBOL	PIN NO.	SYMBOL			
1	NC	17	V <sub>SS</sub>			
2	CS1B	18	V <sub>OUT</sub>			
3	CS2	19	NC			
4	RESB	20	CAP3P			
5	A <sub>0</sub>	21	CAP1N			
6	WRB (W/R)	22	CAP1P			
7	RDB (E)	23	CAP2P			
8	DB0	24	CAP2N			
9	DB1	25	V4			
10	DB2	26	V3			
11	DB3	27	V2			
12	DB4	28	V1			
13	DB5	29	V0			
14	DB6	30	VR			
15	DB7	31	C86			
16	$V_{DD}$	32	NC			





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