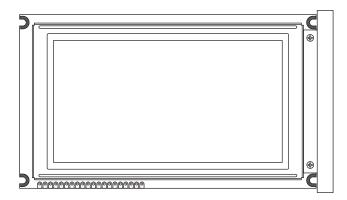




# 240 x 128 Graphic LCD



#### **FEATURES**

• Type: Graphic

• Display format: 240 x 128 dots

• Built-in controller: RA8806

• Duty cycle: 1/128

• + 5 V power supply (+ 3.3 V option)

Built-in N.V.Chinese version

• Compliant to RoHS Directive 2002/95/EC



MECHANICAL DATA					
ITEM	STANDARD VALUE	UNIT			
Module Dimension	140.0 x 82.0				
Viewing Area	114.0 x 64.0				
Dot Size	0.43 x 0.43	mm			
Dot Pitch	0.45 x 0.45				
Mounting Hole	137.0 x 74.5				

ABSOLUTE MAXIMUM RATINGS						
ITEM	SYMBOL	STAN	UNIT			
I I EIVI	STIVIDOL	MIN.	TYP.	MAX.	UNII	
Power Supply	V <sub>DD</sub> to V <sub>SS</sub>	4.75	5.0	5.25	V	
Input Voltage	$V_{l}$	0.3	ı	$V_{DD}$		

#### Note

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

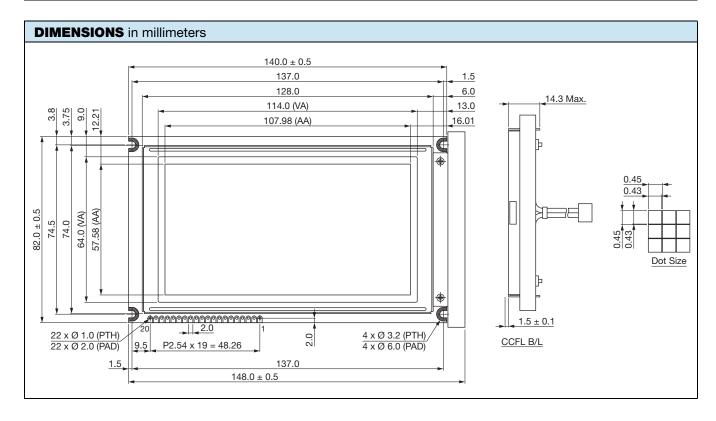
ELECTRICAL CHARACTERISTICS							
ITEM	SYMBOL	CONDITION	STANDARD VALUE				
	STIMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Input Voltage	$V_{DD}$	L level	0.7 V <sub>DD</sub>	-	$V_{DD}$	V	
	V <sub>IO</sub>	H level	-	-	0.3 V <sub>DD</sub>		
Supply Current	I <sub>DD</sub>	$V_{DD} = + 5 V$	0	45	50	mA	
	V <sub>DD</sub> to V <sub>0</sub>	- 20 °C	-	-	-		
Recommended LC Driving		0 °C	20.3	21.4	22.5		
Voltage for Normal Temperature		25 °C	18.0	19.2	20.2	V	
Version Module		50 °C	17.8	18.9	20.0		
		70 °C	-	-	-		
LED Forward Voltage	V <sub>F</sub>	25 °C	-	4.2	-	V	
LED Forward Current	I <sub>F</sub>	25 °C	-	920	1800	mA	
CCFL	V <sub>F</sub>	25 °C	-	250	590		
CCFL	I <sub>F</sub>	25 °C	-	-	5.5		
EL Power Supply Current	I <sub>EL</sub>	V <sub>EL</sub> = 110 V <sub>AC</sub> , 400 Hz	-	-	5.0	mA	

OPTIONS									
	PROCESS COLOR						BACK	LIGHT	
TN	STN GRAY	STN YELLOW	STN BLUE	FSTN B&W	STN COLOR	NONE	LED	EL	CCFL
-	х	х	х	х	-	х	х	х	х

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



INTERFACE PIN FUNCTION						
PIN NO.	SYMBOL	FUNCTION				
1	V <sub>SS</sub>	Ground				
2	V <sub>DD</sub>	Power supply for logic				
3	V <sub>0</sub>	Operating voltage LCD driving				
4	C/D	Command/data read/write				
5	RD	8080 family: read signal; 6800 family: enable signal				
6	WR	8080 family: write signal; 6800 family: read/write signal				
7	DB0	Data bus line				
8	DB1	Data bus line				
9	DB2	Data bus line				
10	DB3	Data bus line				
11	DB4	Data bus line				
12	DB5	Data bus line				
13	DB6	Data bus line				
14	DB7	Data bus line				
15	CS	Chip select				
16	RES	Reset signal				
17	V <sub>EE</sub>	Negative voltage output				
18	Busy	RA8820 busy				
19	INT	Programable interrupt for 8802				
20	A	Power supply for B/L				





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