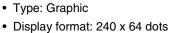


# 240 x 64 Graphic LCD



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• Built-in controller: RA8822 (or equivalent)

• Duty cycle: 1/64

• + 5 V power supply (2.7 V to 5.0 V selectable)

• Built-in N.V.

**FEATURES** 

· Chinese version

• Compliant to RoHS directive 2002/95/EC

MECHANICAL DATA					
ITEM	EM STANDARD VALUE				
Module Dimension	180.0 x 65.0				
Viewing Area	133.0 x 39.0				
Dot Size	0.49 x 0.49	mm			
Dot Pitch	0.53 x 0.53	] '''''			
Mounting Hole	ole 176.0 x 54.0				
Character Size	N/a				

ABSOLUTE MAXIMUM RATINGS						
ITEM	SYMBOL	STAN	LINUT			
IIEW	STWIBUL	MIN.	TYP.	MAX.	UNIT	
Power Supply	$V_{DD}$ to $V_{SS}$	4.75	5.0	5.25	V	
Input Voltage	$V_{I}$	- 0.3	-	$V_{DD}$	V	

#### Note

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

ELECTRICAL CHARACTERISTICS							
ITEM	OVMDOL	CONDITION	STANDARD VALUE				
	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Input Voltage	V <sub>DD</sub>	L level	0.7 V <sub>DD</sub>	-	$V_{DD}$	V	
	V <sub>IO</sub>	H level	0	-	0.3 V <sub>DD</sub>	]	
Supply Current	I <sub>DD</sub>	V <sub>DD</sub> = + 5 V	-	29.0	-	mA	
Recommended LC Driving Voltage for Normal Temperature Version Module	$V_{DD}$ to $V_0$	- 20 °C	13.0	13.5	14.1		
		0 °C	12.5	13.1	13.7	1	
		25 °C	-	12.5	-	V	
		50 °C	11.1	12.2	13.0		
		70 °C	9.1	11.6	12.8		
LED Forward Voltage	V <sub>F</sub>	25 °C	-	4.2	4.6	V	
LED Forward Current	I <sub>F</sub>	25 °C	-	450	900	mA	
CCFL Forward Voltage	V <sub>F</sub>	25 °C	-	215	650	V <sub>RMS</sub>	
CCFL Forward Current	I <sub>F</sub>	25 °C	-	-	5.0	mA	
EL Power Supply Current	I <sub>EL</sub>	V <sub>EL</sub> = 110 V <sub>AC</sub> , 400 Hz	-	-	5.0	mA	

OPTION	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	х	х

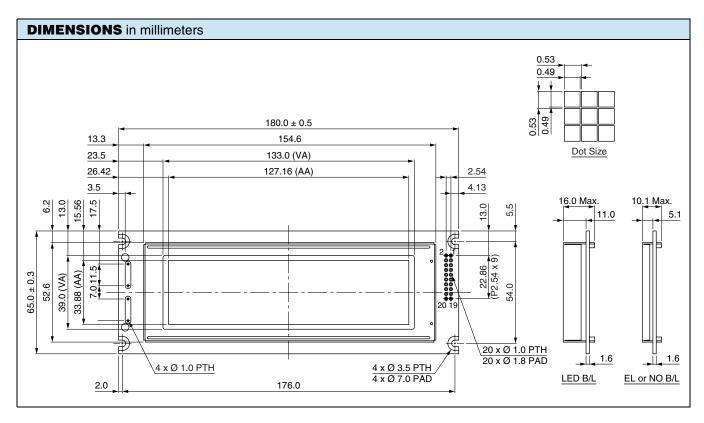
For detailed information, please see the "Product Numbering System" document.

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## 240 x 64 Graphic LCD



INTERFACE PIN FUNCTION					
PIN NO.	SYMBOL	FUNCTION			
1	A	Power supply for B/L			
2	V <sub>SS</sub>	Ground			
3	V <sub>DD</sub>	Power supply for logic			
4	V <sub>0</sub>	Operating voltage LCD driving			
5	WR	8080 family: Read signal/6800 family: Enable clock			
6	RD	8080 family: Write signal/6800 family: Read/write signal			
7	CE	Chip enable			
8	C/D	H: Instruction/L: Data			
9	V <sub>EE</sub>	Negative voltage output			
10	RES	Reset			
11	DB0	DB0 Data bus line			
12	DB1	DB1 Data bus line			
13	DB2	DB2 Data bus line			
14	DB3	DB3 Data bus line			
15	DB4	DB4 Data bus line			
16	DB5	DB5 Data bus line			
17	DB6	DB6 Data bus line			
18	DB7	DB7 Data bus line			
19	Busy	RA8802 statis			
20	INT	Programable interrupt output			







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