



## PIN CONNECTIONS

Pin	Symbol	Level	Function
1	V <sub>SS</sub>	0V	GND
2	V <sub>DD</sub>	+5V	Power supply for logic
3	/RES	L	Reset signal ,active "L"
4	P/S	H/L	H: Parallel mode L: serial mode
5	/CS1	L	Chip selection
6	CS2	H	
7	C86	H/L	H: 6800 interface mode L: 8080 interface mode
8	A0	H/L	H: data; L: Instruction
9	R/W(WR)	H/L	68:H: read; L: write 80: write
10	E(RD)	H/L	68:Chip enable signal 80: read
11   18	DB0   DB7	H/L	Data bus line Serial mode: D7—SI D6—SCL.
19	LEDA	+5V	Power supply for LED backlight
20	LEDK	0V	

### NOTES:

- 5V/3.3V power supply optional
- Built-in controller
- Low power supply

## MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size ( W x H X T )	93.0X70.0X13.0	mm
Viewing Area (W x H )	70.7.X38.8	mm
Dot Pitch (W x H )	0.52X0.52	mm
Dot Size (W x H )	0.48X0.48	mm

## ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage (Logic)	V <sub>DD</sub> -V <sub>SS</sub>	-0.3	7.0	V
Supply Voltage (LCD)	V <sub>0</sub> -V <sub>SS</sub>	-0.3	15.0	V
Input Voltage	V <sub>I</sub>	-0.3	V <sub>DD</sub> +0.3	V
Operating Temp.	T <sub>OPR</sub>	-20	70	
Storage Temp.	T <sub>STG</sub>	-30	80	

## ELECTRICAL CHARACTERISTICS ( V<sub>DD</sub>=3.0V, T<sub>a</sub>=25 )

Item	Symbol	Min.	Typ.	Max.	Unit
Input High Voltage	V <sub>IH</sub>	0.7V <sub>DD</sub>	-	V <sub>DD</sub>	V
Input Low Voltage	V <sub>IL</sub>	V <sub>SS</sub>	-	0.3V <sub>DD</sub>	V
Output High Voltage	V <sub>OH</sub>	0.7V <sub>DD</sub>	-	V <sub>DD</sub>	V
Output Low Voltage	V <sub>OL</sub>	V <sub>SS</sub>	-	0.3V <sub>DD</sub>	V
Supply Current	I <sub>DD</sub>	-	1.2	-	mA
LCD Driving Voltage	V <sub>0</sub> -V <sub>SS</sub>	4.5	-	11.5	V

## LED BACKLIGHT SPECIFICATIONS ( T<sub>a</sub>=25 )

Item	Forward Voltage	Forward Current
YELLOW-GREEN	4.1V	360mA
White	3.1V	40mA