



## PIN CONNECTIONS

Pin	Symbol	Level	Function
1	V <sub>SS</sub>	0V	GND
2	V <sub>DD</sub>	3.3V	Logic power supply
3	NC	-	No connection
4	/WR	L	Write signal
5	/RD	L	Read signal
6	/CS	L	Chip enable signal
7	A0	H/L	“H” Data “L” Instruction code
8	/REST	L	Reset signal ,active “L”
9   16	DB0   DB7	H/L	Data bus line
17	NC	-	No connection
18	NC	-	No connection
19	A	3.3V	Power supply for LED
20	K	0V	backlight

### NOTES:

- Built-in controller
- FSTN

## MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size (W x H x T)	81.44X81.44X8.0	mm
Viewing Area (W x H)	60.0 X60.0	mm
Dot Pitch (W x H)	0.34X0.34	mm
Dot Size (W x H)	0.32X0.32	mm

## ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage (Logic)	V <sub>DD</sub> -V <sub>SS</sub>	-0.3	4.0	V
Supply Voltage (LCD)	V <sub>0</sub>	-0.3	19.8	V
Input Voltage	V <sub>I</sub>	-0.3	V <sub>DD</sub> +0.3	V
Operating Temp.	T <sub>OPR</sub>	-25	75	°C
Storage Temp.	T <sub>STG</sub>	-30	80	°C

## ELECTRICAL CHARACTERISTICS (V<sub>DD</sub>=5.0V, Ta=25°C)

Item	Sym.	Min.	Typ.	Max.	Unit
Input High Voltage	V <sub>IH</sub>	0.8V <sub>DD</sub>	3.3	-	V
Input Low Voltage	V <sub>IL</sub>	-	-	0.2V <sub>DD</sub>	V
Output High Voltage	V <sub>OH</sub>	0.8V <sub>DD</sub>	-	-	V
Output Low Voltage	V <sub>OL</sub>	-	-	0.2V <sub>DD</sub>	V
Supply Current	I <sub>DD</sub>	-	-	-	mA
LCD Driving Voltage	V <sub>0</sub>	-	16.5	-	V

## LED BACKLIGHT SPECIFICATIONS (Ta=25°C)

Item	Forward Voltage	Forward Current
White	3.1V	60mA