



**Interface Pin Connections**

NO	SYM	LEVE	FUNCTION	NO	SYM	LEV	FUNCTION
1	FG	-	FRAME GROUND	11	DB1	H/L	DATA BIT 1
2	V <sub>SS</sub>	-	GND	12	DB2	H/L	DATA BIT 2
3	V <sub>DD</sub>	-	5V	13	DB3	H/L	DATA BIT 3
4	VEE	-	OPERATING VOLTAGE	14	DB4	H/L	DATA BIT 4
5	/WR	-	WRITE ENABLE SIGNAL	15	DB5	H/L	DATA BIT 5
6	/RD	-	READ ENABLE SIGNAL	16	DB6	H/L	DATA BIT 6
7	/CE	-	CHIP ENABLE SIGNAL	17	DB7	H/L	DATA BIT 7
8	C/D	-	H: INSTRUCTION, L:	18	FS	-	FONT SELECTION
9	/RST	-	RESET SIGNAL	19	A(+)	4.2V	BACKLIGHT
10	DB <sub>0</sub>	H/L	DATA BIT 0	20	K(-)	GND	BACKLIGHT

**Absolute Maximum Rating**

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
POWER SUPPLY	V <sub>DD</sub> -V <sub>SS</sub>	-0.3	---	5.5	V
INPUT VOLTAGE	V <sub>I</sub>	-0.3	---	V <sub>DD</sub>	

**Electrical Characteristics**

ITEM	SYM	CONDITION	MIN	TYP	MAX	UNIT
INPUT VOLTAGE	V <sub>DD</sub>	+ 5V	4.7	5.0	5.5	V
SUPPLY CURRENT	I <sub>DD</sub>	V <sub>DD</sub> = 5V	---	10	---	mA
RECOMMENDED LCD DRIVING VOLTAGE FOR NORMAL TEMPERATURE VERSION MODULE	V <sub>DD</sub> -V <sub>O</sub>	-20 C	----	---	---	V
		0 C	---	19.5	---	
		25 C	---	19.0	---	
		50 C	---	18.0	---	
		70 C	---	---	---	
LED FORWARD	V <sub>F</sub>	25 C	----	4.2	4.5	V
LED FORWARD	I <sub>F</sub>	25 C	---	---	---	mA
EL POWER SUPPLY CURRENT	I <sub>EL</sub>	V <sub>EL</sub> = 110V AC 400Hz	---	---	---	mA

**Mechanical Data**

ITEM	STANDARD	UNIT
MODULE DIMENSION	92.0 X 106.0	mm
VIEWING AREA	73.0 X 73.0	mm
DOT SIZE	0.50 X 0.50	mm
CHARACTER SIZE	0.55 X 0.55	mm