



ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage	V _{DD} - V _{SS}	-0.3	5.5	V
Input Voltage	V _I	-0.3	V _{DD} + 0.3	V
Operating Temp.	T _{opr}	-20	70	°C
Storage Temp.	T _{stg}	-30	80	°C

MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size (W x H x T)	144.0 x 104.0 x 14.5	mm
Viewing Area (W x H)	113.9 x 65.2	mm
Dot Pitch (W x H)	0.462 x 0.462	mm
Weight	Approx. 140	g

ELECTRICAL CHARACTERISTICS (V_{DD}=3.3V to 5.5V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V _{IH}	--	0.8V _{DD}	--	V _{DD}	V
Input Low Voltage	V _{IL}	--	0	--	0.8	V
Supply Current (LED is turned on)	I _{DD}	V _{DD} = 5.0V	--	210	240	mA
		V _{DD} = 3.3V	--	290	330	mA
Supply Current (LED is turned off)	I _{DD}	V _{DD} = 5.0V	--	80	95	mA
		V _{DD} = 3.3V	--	75	90	mA

PIN CONNECTIONS (CN1)

Pin	Symbol	Level	Function
1	FG	--	Frame ground
2	V _{SS}	0V	GND
3	V _{DD}	3.3 to 5.5V	Power supply for logic and LED
4	NC/PWM	--	J3 open: No connection (default) J3 close: PWM signal for LED
5	/WR	L	Write signal. Active "L".
6	/RD	L	Read signal. Active "L".
7	/CE	L	Chip enable signal. Active "L".
8	C/D	H/L	L : Data H : Instruction code
9	NC	--	No connection
10	/RST	L	Reset signal. Active "L".
11	DB0	H/L	Data bus
12	DB1	H/L	
13	DB2	H/L	
14	DB3	H/L	
15	DB4	H/L	
16	DB5	H/L	
17	DB6	H/L	
18	DB7	H/L	
19	FS	H/L	Font selection L: 8x8, H: 6x8
20	NC/V _{DD}	--	
21	PWM	H/L	PWM signal for LED control PWM="H": LED backlight on PWM="L": LED backlight off
22	NC	--	No connection

BLOCK DIAGRAM

