



Feature

1. 160x160 dots FSTN
2. 4-Bit data bus.
3. +5V power supply
4. 1/160 duty cycle

Pin Assignment

Pin	Symbol	Function
1	EL1	Power supply for EL (+)
2	EL2	Power supply for EL (GND)
3	NC	No Connection
4	FLM	Scan start-up signal
5	CL1(LP)	Data latch pulse
6	CL2(SCP)	Data shift pulse
7	DISP	H:ON L:OFF
8	VDD	Power supply for logic(+)
9	Vss	Power supply (0V)
10	VLCD	Power supply for LCD (+V)
11	D0	Data Bus Line
12	D1	Data Bus Line
13	D2	Data Bus Line
14	D3	Data Bus Line
15	Vss	Power supply (0V)
16	Vss	Power supply (0V)
17-20	NC	No Connection

Mechanical Data

Item	Standard Value	Unit
Module Dimension	69.0 x 69.5	mm
Viewing Area	60.0 x 60.0	mm
Dot Size	0.33 x 0.33	mm
Dot Pitch	0.35 x 0.35	mm

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power Supply	VDD-VSS	--	5.0	6.5	V
Input Voltage	VI	0.5VDD	--	VDD	V

Electronical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			min.	typ.	max.	
Input Voltage	VDD	L level	0.8VDD	VDD	--	V
	VIO	H level	VSS	0.2VDD	--	V
Supply Current	IDD	VDD=+5V	--	--	--	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	0°C	18.5	20.0	21.5	V
		25°C	17.5	19.0	20.5	
		50°C	16.5	18.0	19.5	
Power consumption	--	VDD=+5V VSS=19.0V	--	0.19	--	mA