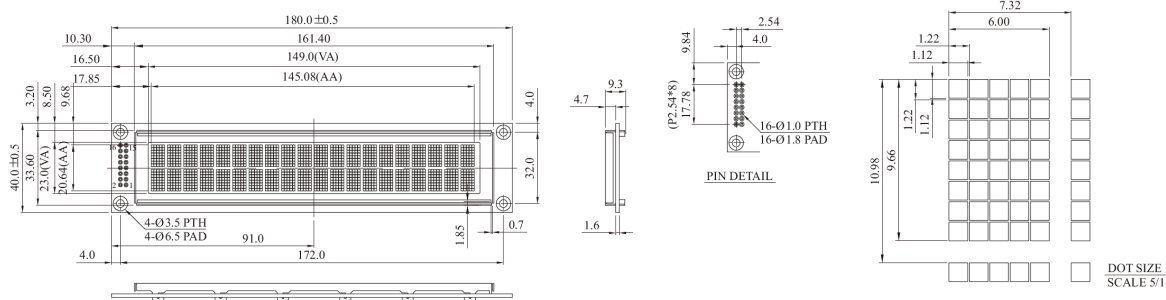


Dimension drawing



Feature

1. 20x2 dots includes cursor
2. Built-in Controller WS0010
3. +5V power supply, +3V optional
4. 1/16 duty cycle
5. Interface: 6800, option 8080 & SPI
6. Sunlight readable & polarizer optional

Mechanical Date

Item	Dimension	Unit
Module dimension	180.0 x 40.0 x 9.3(MAX)	mm
View area	149.0 x 23.0	mm
Active area	145.08 x 20.64	mm
Mounting hole	172.0 x 32.0	mm
Dot size	1.12 x 1.12	mm
Dot pitch	1.22 x 1.22	mm
Character size	6.0 x 9.66	mm
Character pitch	7.32 x 10.98	mm

Pin No.	Symbol	Description
1	VSS	Ground
2	VDD	Supply Voltage for logic
3	NC	
4	RS	H: DATA, L: Instruction code
5	R/W	H: Read(MPU←Module) L: Write(MPU→Module)
6	E	H→L Enable signal
7	DB0	Data bit 0
8	DB1	Data bit 1
9	DB2	Data bit 2
10	DB3	Data bit 3
11	DB4	Data bit 4
12	DB5	Data bit 5
13	DB6	Data bit 6
14	DB7	Data bit 7
15	NC	
16	NC	

Absolute Maximum Rating

Item	Symbol	Min	Max	Unit	Notes
Input Voltage	V _I	-0.3	VDD	V	
Supply Voltage For Logic	VDD-V _{SS}	-0.3	5.3	V	

Electronical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	VDD-VSS	-	3.0	5.0	5.3	V
Input High Volt.	V _{IH}	-	0.9 VDD	-	VDD	V
Input Low Volt.	V _{IL}	-	GND	-	0.1VDD	V
Output High Volt.	V _{OH}	I _{OH} =-0.5mA	0.8 VDD	-	VDD	V
Output Low Volt.	V _{OL}	I _{OL} =0.5mA	GND	-	0.2 VDD	V
Supply Current	I _{DD}	VDD=5V	-	70	-	mA