

**WINSTAR Display**

**OLED SPECIFICATION**

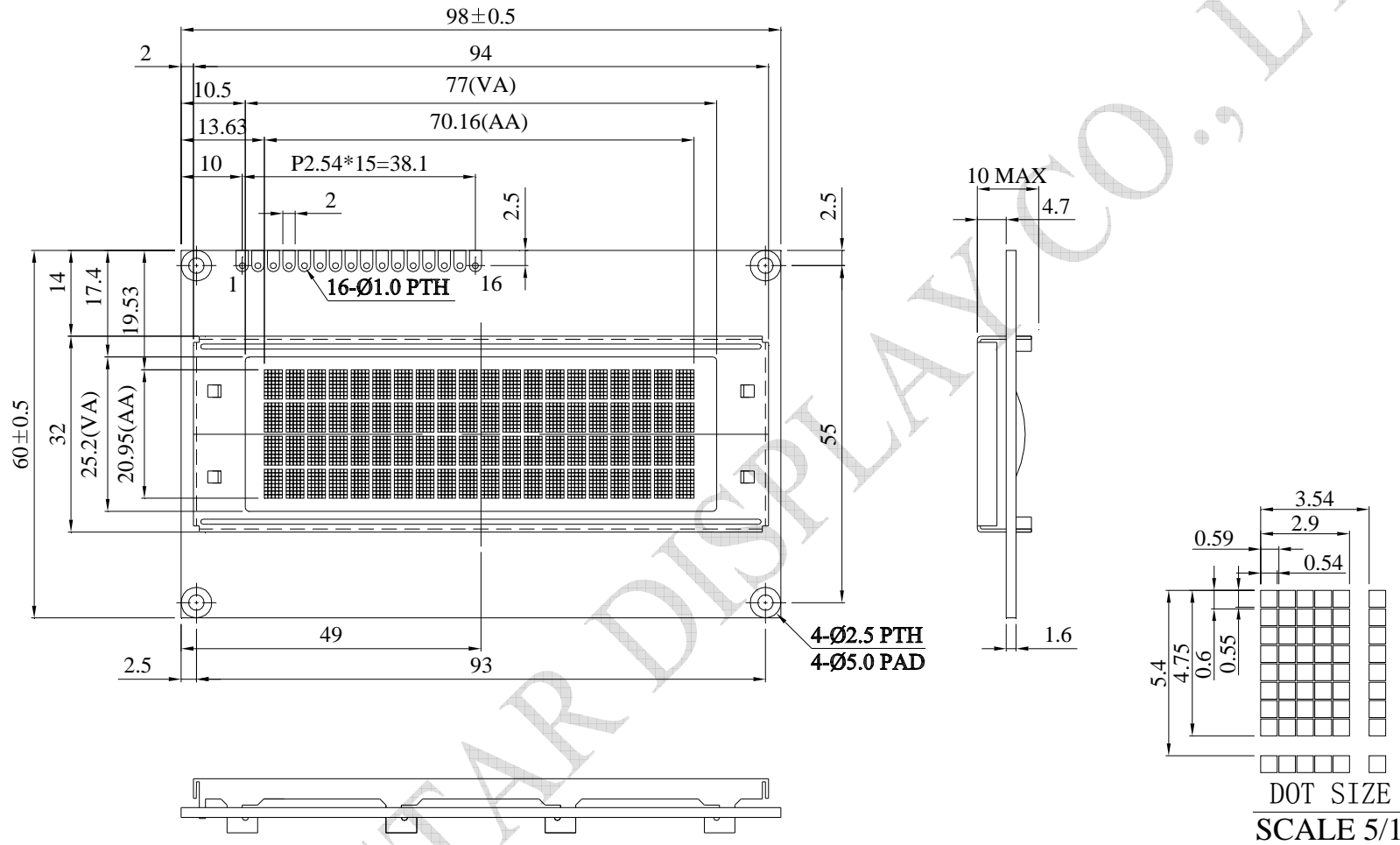
Model No:

**WEH002004A**

## General Specification

Item	Dimension	Unit
Number of Characters	20 characters x 4 Lines	—
Module dimension	98.0 x 60.0 x 10.0(MAX)	mm
View area	77.0 x 25.2	mm
Active area	70.16 x 20.95	mm
Dot size	0.54 x 0.55	mm
Dot pitch	0.59 x 0.60	mm
Character size	2.9 x 4.75	mm
Character pitch	3.54 x 5.4	mm
Panel type	OLED , Monochrome	
Duty	1/16	
IC	WS0010-TX	
Interface	6800, option 8080, SPI	
Size	2.88 inch	

# Contour Drawing & Block Diagram



PIN	SYMBOL
1	VSS
2	VDD
3	NC
4	RS
5	R/W
6	E
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	NC
16	NC

The non-specified tolerance of dimension is  $\pm 0.3 \text{ mm}$ .

## Interface Pin Function

Pin No.	Symbol	Level	Description
1	VSS	0V	Ground
2	VDD	5.0V	Supply Voltage for logic
3	NC	—	
4	RS	H/L	H: DATA, L: Instruction code
5	R/W	H/L	H: Read(Module→MPU) L: Write(MPU→Module)
6	E	H,H→L	Chip enable signal
7	DB0	H/L	Data bit 0
8	DB1	H/L	Data bit 1
9	DB2	H/L	Data bit 2
10	DB3	H/L	Data bit 3
11	DB4	H/L	Data bit 4
12	DB5	H/L	Data bit 5
13	DB6	H/L	Data bit 6
14	DB7	H/L	Data bit 7
15	NC	—	
16	NC	—	

## Absolute Maximum Ratings

Item	Symbol	Min	Max	Unit
Operating Temperature	TOP	-40	+80	°C
Storage Temperature	TST	-40	+85	°C
Supply Voltage For Logic	VDD-VSS	-0.3	5.3	V

## Electrical Characteristics

### DC Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	VDD-VSS	—	4.8	5.0	5.3	V
Input High Volt.	VIH	—	0.8xVDD	—	VDD	V
Input Low Volt.	VIL	—	GND	—	0.2xVDD	V
Output High Volt.	VOH	IOH=-0.5mA	0.8xVDD	—	VDD	V
Output Low Volt.	VOL	IOL=0.5mA	GND	—	0.2xVDD	V
50% Check Board Operating Current	IDD	VDD=5V	—	230	345	mA