

**WINSTAR Display**

**OLED SPECIFICATION**

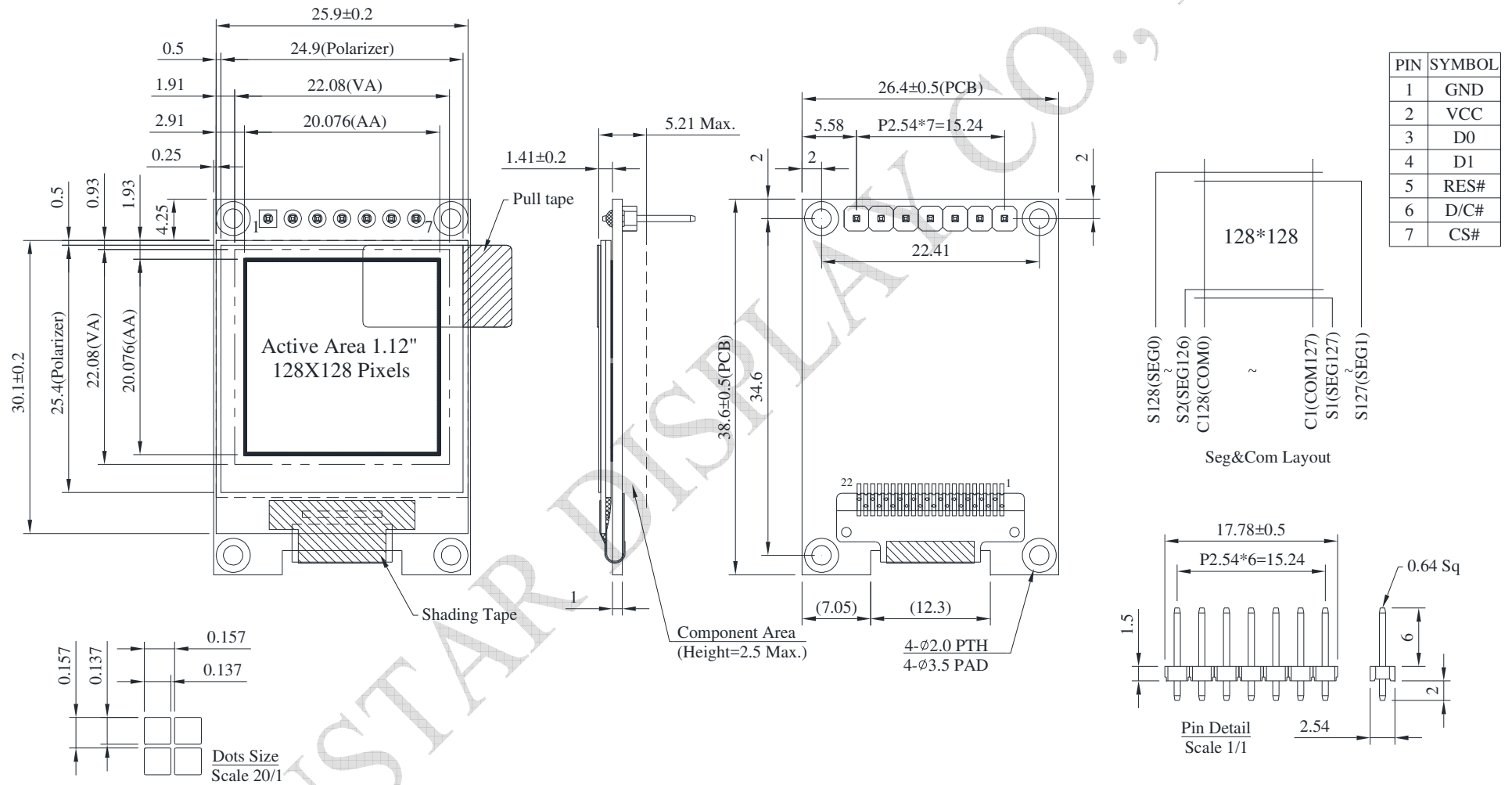
Model No:

**WEA128128G**

## General Specification

| Item             | Dimension               | Unit |
|------------------|-------------------------|------|
| Dot Matrix       | 128 x 128 Dots          | —    |
| Module dimension | 26.4 x 38.6 x 5.21 Max. | mm   |
| Active Area      | 20.076 x 20.076         | mm   |
| Pixel Size       | 0.137 x 0.137           | mm   |
| Pixel Pitch      | 0.157 x 0.157           | mm   |
| Display Mode     | Passive Matrix          |      |
| Display Color    | Monochrome              |      |
| Drive Duty       | 1/128 Duty              |      |
| IC               | SH1107                  |      |
| Interface        | 4-Wire SPI              |      |
| Size             | 1.12 inch               |      |

# Contour Drawing & Block Diagram



| PIN | SYMBOL |
|-----|--------|
| 1   | GND    |
| 2   | VCC    |
| 3   | D0     |
| 4   | D1     |
| 5   | RES#   |
| 6   | D/C#   |
| 7   | CS#    |

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

## Interface Pin Function

| No. | Symbol | Function  |
|-----|--------|---|
| 1   | GND    | Ground  |
| 2   | VCC    | Power supply for logic and input.   |
| 3   | D0     | The serial clock input pad.   |
| 4   | D1     | The serial data input pad.  |
| 5   | RES#   | This is a reset signal input pad. When RES is set to "L", the settings are initialized. The reset operation is performed by the RES signal level. |
| 6   | D/C#   | This is the Data/Command control pad that determines whether the data bits are data or a command.   |
| 7   | CS#    | This pad is the chip select input.  |

## Absolute Maximum Ratings

| Parameter                | Symbol | Min | Max | Unit |
|--------------------------|--------|-----|-----|------|
| Supply Voltage for Logic | VCC    | 0   | 7   | V    |
| Operating Temperature    | TOP    | -40 | +80 | °C   |
| Storage Temperature      | TSTG   | -40 | +85 | °C   |

## Electrical Characteristics

### DC Electrical Characteristics

| Item                     | Symbol | Condition | Min     | Typ | Max     | Unit |
|--------------------------|--------|-----------|---------|-----|---------|------|
| Supply Voltage for Logic | VCC    | —         | 2.0     | 3.0 | 3.3     | V    |
| Input High Volt.         | VIH    | —         | 0.8×VCC | —   | VCC     | V    |
| Input Low Volt.          | VIL    | —         | 0       | —   | 0.2×VCC | V    |
| Output High Volt.        | VOH    | —         | 0.8×VCC | —   | VCC     | V    |
| Output Low Volt.         | VOL    | —         | 0       | —   | 0.2×VCC | V    |
| Display 50% Pixel on     | ICC    | VCC=3V    | —       | 65  | 97.5    | mA   |