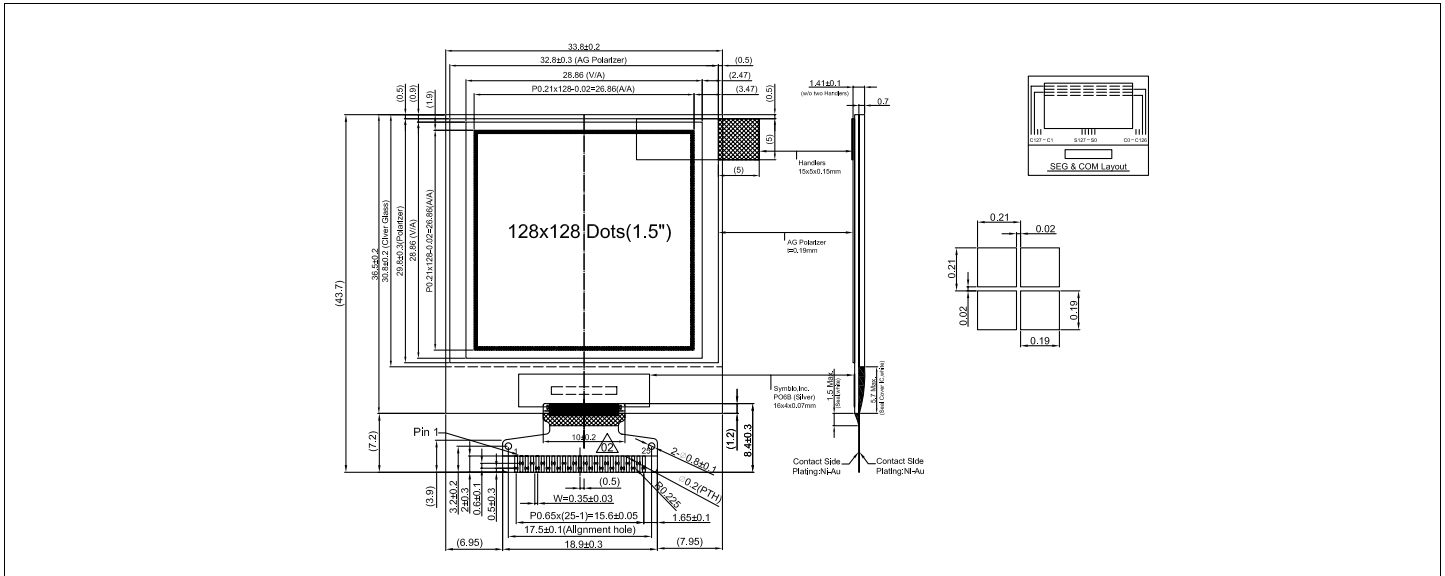


# HDR128128-Y/W

## Dimensional Drawing

## 128 X 128 Dots Graphic, Yellow/White OLED Display



- Features**
- Viewing Angle.....Wide (160 degrees)
  - High Contrast.....2000:1
  - Fast Response Time.....10 usec
  - Built-in DC-DC Converter
  - Built-in Controller.....SSD1327

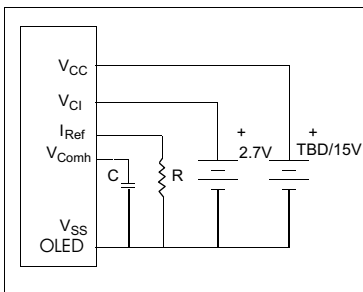
### Physical Data

- Module Size.....33.8W x43.7H x 1.41T mm
- Viewing Area Size.....28.86W x 28.86H mm
- Dot Pitch.....0.21W x 0.21H mm
- Dot Size.....0.19W x 0.19H mm
- Weight.....TBD

### Electrical Characteristics (VCC=TBD/15 ±5% 25°C)

| PARAMETER             | SYM             | CONDITION     | MIN                 | TYP    | MAX                | UNIT              |
|-----------------------|-----------------|---------------|---------------------|--------|--------------------|-------------------|
| OPERATING VOLTAGE     | V <sub>CI</sub> | -             | 2.6                 | 2.7    | 3.5                | V                 |
| OPERATING VOLTAGE Y/W | VCC             | -             | TBD/14.5            | TBD/15 | TBD/15.5           | V                 |
| INPUT HIGH VOLTAGE    | V <sub>IH</sub> | -             | 0.8*V <sub>CI</sub> | -      | V <sub>CI</sub>    | V                 |
| INPUT LOW VOLTAGE     | V <sub>IL</sub> | -             | 0                   | -      | 0.2V <sub>CI</sub> | V                 |
| OPERATING CURRENT     | I <sub>CI</sub> | All pixels on | -                   | TD/600 | -                  | uA                |
| OPERATING CURRENT     | I <sub>CC</sub> | All pixels on | -                   | TBD/32 | TBD/34             | mA                |
| POWER CONSUMPTION     | P <sub>D</sub>  | All pixels on | -                   | TD/480 | TBD/510            | mW                |
| BRIGHTNESS            | L               | Average       | TBD/70              | TBD/90 | -                  | cd/m <sup>2</sup> |
| DRIVE METHOD          |                 |               | 1/64 Duty           |        |                    |                   |

### Power Supply



### Absolute Maximum Ratings

| PARAMETER                                 | SYMBOL           | MIN          | MAX                   | UNIT |
|---|------------------|--------------|-----------------------|------|
| SUPPLY VOLTAGE                            | V <sub>CI</sub>  | -0.3         | 3.5/4                 | V    |
| SUPPLY VOLTAGE                            | VCC              | 8/8          | 18/19                 | V    |
| INPUT VOLTAGE                             | V <sub>IN</sub>  | -0.3         | V <sub>DD</sub> + 0.3 | V    |
| OPERATING TEMPERATURE                     | T <sub>OP</sub>  | -40          | 70                    | °C   |
| STORAGE TEMPERATURE                       | T <sub>STG</sub> | -40          | 85                    | °C   |
| LIFE TIME Y/W (80/100 cd/m <sup>2</sup> ) |                  | TBD/(12/10K) |                       | HrsT |

### Pin Connections

| PIN NO. | SYMBOL | FUNCTION |   |
|---------|--------|----------|---|
| 1       | VSS    | I        | Ground Pin                              |
| 2       | VCC    | I        | Power Supply for OLED driver            |
| 3       | VCOMH  | I        | COM Deselected Voltage Level            |
| 4       | GPIO   | H/L      | General I/O Port                        |
| 5       | VCI    | I        | Power Supply Input                      |
| 6       | VDD    | I        | Power Supply for internal logic         |
| 7       | Bs1    | H/L      | MCU interface selection input           |
| 8       | Bs2    | H/L      | MCU interface selection input           |
| 9       | VSS    | I        | Ground Pin                              |
| 10      | IREF   | I        | Reference input (connect recom. Res. R) |
| 11      | CS#    | L        | Chip select input                       |
| 12      | RES#   | L        | Hardware reset input                    |
| 13      | D/C#   | H/L      | Data-command control input              |
| 14      | WR#    | L        | Write data input                        |
| 15      | RD#    | L        | Read data input                         |
| 16      | D0     | H/L      | Bi-directional data bus                 |
| 17      | D1     | H/L      | Bi-directional data bus                 |
| 18      | D2     | H/L      | Bi-directional data bus                 |
| 19      | D3     | H/L      | Bi-directional data bus                 |
| 20      | D4     | H/L      | Bi-directional data bus                 |
| 21      | D5     | H/L      | Bi-directional data bus                 |
| 22      | D6     | H/L      | Bi-directional data bus                 |
| 23      | D7     | H/L      | Bi-directional data bus                 |
| 24      | VCC    | I        | Power Supply for logic                  |
| 25      | VSS    | I        | Ground Pin                              |