## Mechanical Data

| Item | Dimension | Unit |
|---|---|---|
| Module dimension | 89.7 × 47.2 × 3.4 | mm |
| View Area | 63.41 x 32.69 | mm |
| Active area | 61.41 × 30.69 | mm |
| Mounting hole | 82.7 × 40.2 | mm |
| Dot Size | 0.45 × 0.45 | mm |
| Dot Pitch | 0.48 × 0.48 | mm |

## Absolute Maximum Rating

| Parameter | Symbol | Min | Max | Unit | Notes |
|---|---|---|---|---|---|
| Supply Voltage for Logic | VDD | -0.3 | 3.5 | V | 1, 2 |
| Supply Voltage for Display | VCC | 8 | 16 | V | 1, 2 |

## Electronical Characteristics

| Characteristics | Symbol | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Supply Voltage for Logic | VDD | – | 2.4 | 2.7 | 3.5 | V |
| Supply Voltage for Display | VCC | – | 14.5 | 15 | 15 | V |
| High Level Input | VIH | IOUT= 100μA, 3.3MHz | 0.8×VDD | – | VDD | V |
| Low Level Input | VIL | IOUT= 100μA, 3.3MHz | 0 | – | 0.2×VDD | V |
| High Level Output | VOH | IOUT= 100μA, 3.3MHz | 0.9×VDD | – | VDD | V |
| Low Level lutput | VOL | IOUT= 100μA, 3.3MHz | 0 | – | 0.1×VDD | V |
| Operating Current for VDD | IDD | Note 4 | – | 250 | 400 | μA |
| | | Note 5 | – | 250 | 400 | μA |
| Operating Current for VCC | ICC | Note 4 | – | 31 | 39 | mA |
| | | Note 5 | – | 53 | 66 | mA |
| Sleep Mode Current for VDD | IDD, SLEEP | | – | – | 10 | μA |
| Sleep Mode Current for VCC | ICC, SLEEP | | – | – | 10 | μA |

Note 3: Brightness ($L_{BR}$) and Supply Voltage for Display ($V_{CC}$) are subject to the change of the panel characteristics and the customer's request.
Note 4: $V_{DD}$ = 2.7V, $V_{CC}$ = 15V, 50% Display Area Turn on.
Note 5: $V_{DD}$ = 2.7V, $V_{CC}$ = 15V, 100% Display Area Turn on.

## Feature

1. 128 x 64 dots
2. Built-in Controller SSD1305T7R1
3. +3V power supply
4. 1/64 duty cycle
5. Interface: 6800, 8080, SPI, I2C
6. Polarizer optional

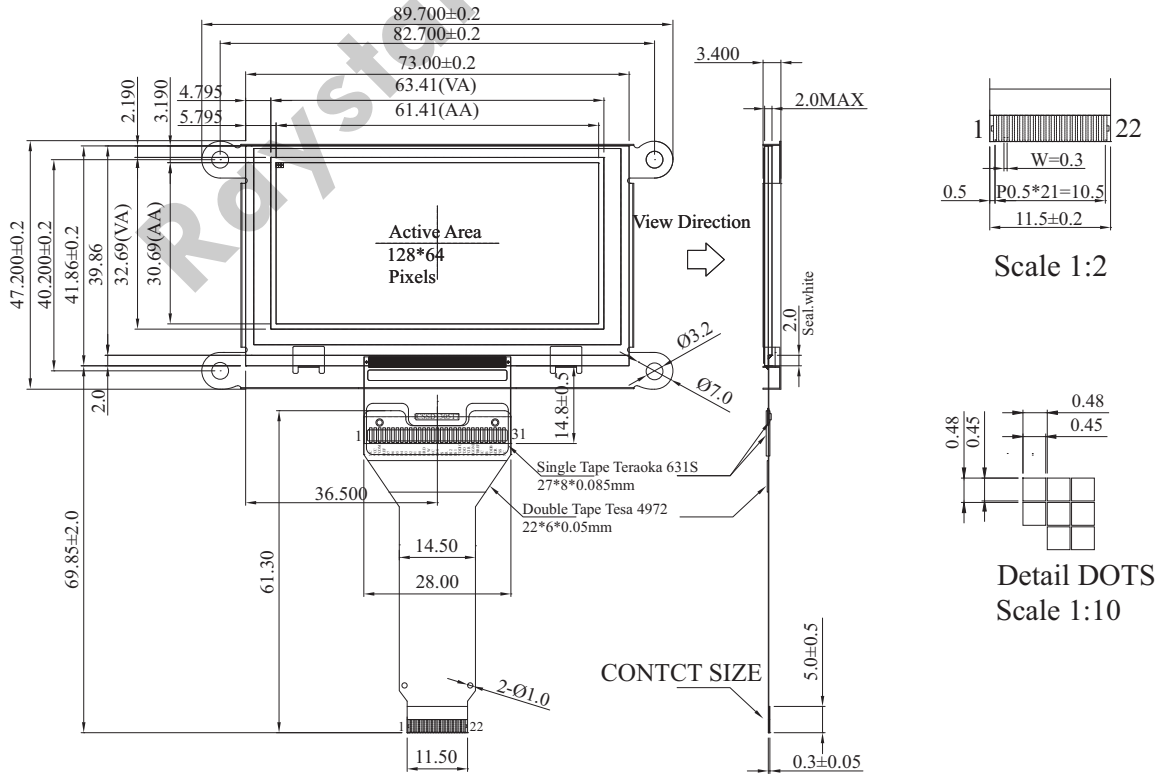
| Pin NO. | Symbol | Description |
|---|---|---|
| 1 | VCC | Power supply for analog circuit. |
| 2 | VCOMH | Com Voltage Output. A capacitor should be connected between this pin and VSS. |
| 3 | IREF | Reference current input pin. A resistor should be connected between this pin and VSS. |
| 4~11 | D7~D0 | Data bus. |
| 12 | E/RD# | Data read operation is initiated when it's pull low. |
| 13 | R/W# | Data write operation is initiated when it's pull low. |
| 14 | D/C# | Data/ Command control. Pull high for write/read display data. Pull low for write command or read status. |
| 15 | RES# | Reset signal input. When it's low, initialization of SSD1305 is executed. |
| 16 | CS# | Chip select input. |
| 17 | BS2 | Communicating Protocol Select These pins are MCU interface selection input. See the following table: |
| 18 | BS1 | |
| 19 | VDD | Power supply for logic circuit. |
| 20 | NC | No connection. |
| 21 | VSS | Ground. |
| 22 | VSS | Ground. |

| | 68XX-parallel | 80XX-parallel | Serial |
|---|---|---|---|
| BS1 | 0 | 1 | 0 |
| BS2 | 1 | 1 | 0 |

OLED Graphic type

## RET012864C OLED Graphic 128x64 dots

### Dimension drawing




Raystar Optronics, Inc.