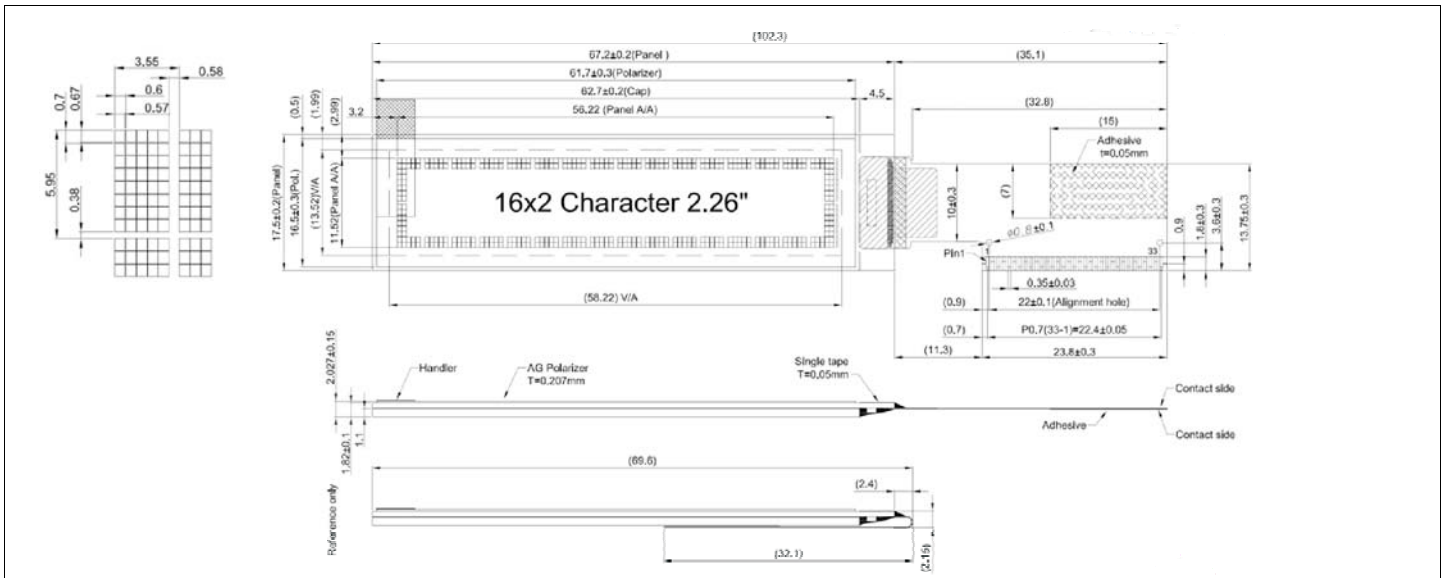


HDR162-1

Dimensional Drawing

16 Characters x 2 Lines, 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.....SSD1311

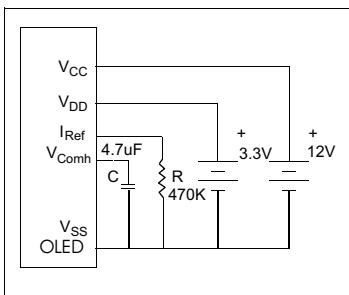
Physical Data

- Module Size.....102.3W x 17.5H x 2.027T mm
- Panel Size.....76.2W x 17.5H mm
- Viewing Area Size.....63.41W x 32.69H mm
- Weight.....5.01 gm

Electrical Characteristics (VCC = 12 ± 5% 25°C)

| PARAMETER | SYM | CONDITION | MIN | TYP | MAX | UNIT |
|--------------------|-----------------|---------------|---------------------|-----|---------------------|-------------------|
| OPERATING VOLTAGE | VDD | - | 2.4 | 3.3 | 3.6 | V |
| OPERATING VOLTAGE | VCC | - | 11.5 | 12 | 12.5 | V |
| INPUT HIGH VOLTAGE | V _{IH} | - | 0.8*V _{DD} | - | V _{DD} | V |
| INPUT LOW VOLTAGE | V _{IL} | - | 0 | - | 0.2*V _{DD} | V |
| OPERATING CURRENT | I _{DD} | All pixels on | - | 90 | 110 | uA |
| OPERATING CURRENT | I _{CC} | All pixels on | - | TBD | - | mA |
| POWER CONSUMPTION | P _D | All pixels on | - | TBD | - | mW |
| BRIGHTNESS | L | Average | 100 | 120 | - | cd/m ² |
| DRIVE METHOD | 1/16 Duty | | | | | |

Power Supply



Absolute Maximum Ratings

| PARAMETER | SYMBOL | MIN | MAX | UNIT |
|--|------------------|--------|-----------------------|------|
| SUPPLY VOLTAGE | VDD | -0.3 | 6 | V |
| SUPPLY VOLTAGE | VCC | 10 | 16 | V |
| INPUT VOLTAGE | V _{IN} | -0.3 | V _{DD} + 0.3 | V |
| OPERATING TEMPERATURE | T _{OP} | -40 | 70 | °C |
| STORAGE TEMPERATURE | T _{STG} | -40 | 85 | °C |
| LIFE TIME (100/140 Cd/m ²) | | 54/38k | - | Hrs |

Pin Connections

| PIN NO. | SYMBOL | FUNCTION | |
|---------|--------|----------|--|
| 1 | NC | I | No Connection |
| 2 | VSL | I | Segment Voltage Reference Input |
| 3 | VSS | I | Ground |
| 4 | REGVDD | H/L | Enable/Disable Internal VDD Regulator |
| 5 | SHLC | H/L | Scan Direction . Normal/Reverse |
| 6 | SHLS | H/L | Mapping Disp. Dat. Col. Add.-Seg. Drw. |
| 7 | VDD | I | Power Supply for Core Logic |
| 8 | VDDIO | I | Power Supply for Interface Logic |
| 9-11 | BS0-2 | H/L | CPU Interface Selection |
| 12 | GPIO | I/O | GPIO Input/Output |
| 13 | CS# | H/L | Chip Select - active low |
| 14 | RES# | L | Hardware reset input |
| 15 | D/C# | H/L | Data-Command Control Input |
| 16 | R/WR# | L | Write Data Input |
| 17 | E/RD# | L | Read Data Input |
| 18-25 | D0-D7 | H/L | Bi-directional Data Bus |
| 26 | IREF | H/L | Seg. Out. Current Ref. Input |
| 27-28 | ROM0-1 | H/L | Character ROM Selection |
| 29-30 | OPR0-1 | H/LI | Character Generator Selection |
| 31 | VCOMH | O | COM Output (connect Reg. Capacitor) |
| 32 | VCC | I | Panel Power Supply |
| 33 | N/C | - | No Connection |