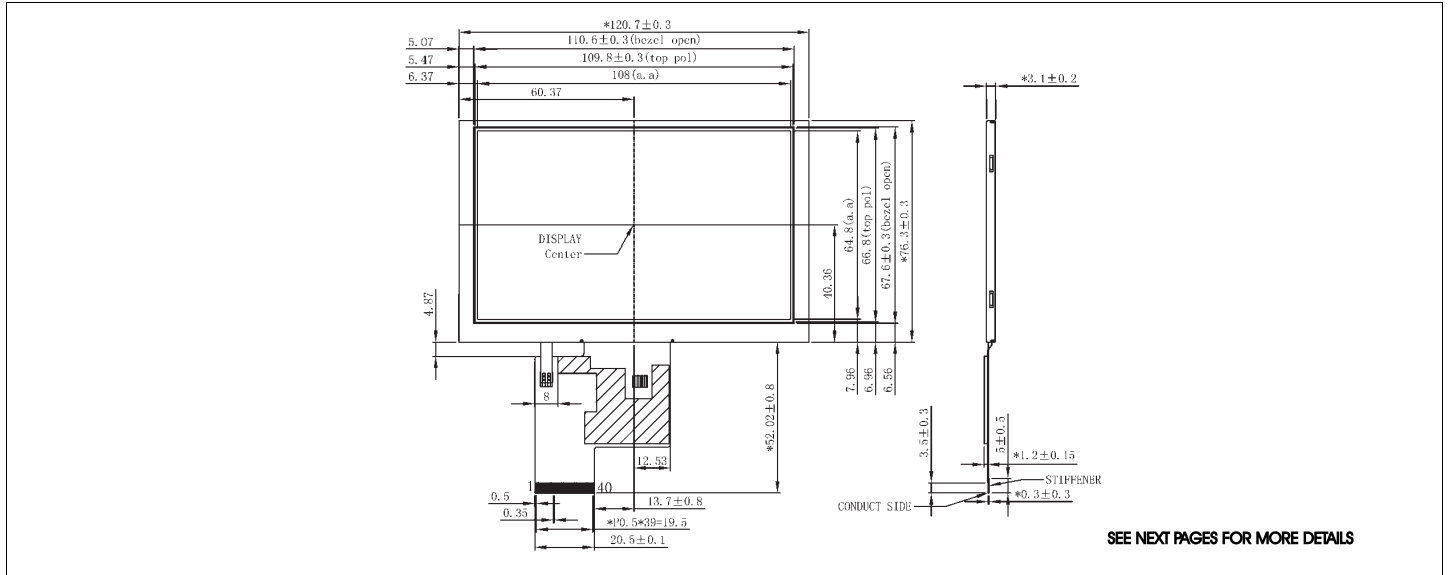


# HDA500-1S

## Dimensional Drawing

5", WVGA(800X480) TFT, Transmissive, Color



### Features

- Viewing Angle(H/V).....140/120 degrees
- High Contrast.....500.
- Fast Response Time.....25 msec
- Built-in DC-DC Converter
- Built-in Controller.....none
- Touch screen (CTP) .....optional

### Electrical Characteristics (VDD=3.3±0.1 25V 25°C)

| PARAMETER             | SYM               | CONDITION | MIN                | TYP  | MAX                | UNIT              |
|-----------------------|-------------------|-----------|--------------------|------|--------------------|-------------------|
| OPERATING VOLTAGE     | V <sub>DD</sub>   | -         | 3.1                | 3.3  | 3.5                | V                 |
| INPUT HIGH VOLTAGE    | V <sub>HI</sub>   | -         | 0.7V <sub>DD</sub> | -    | V <sub>DD</sub>    | V                 |
| INPUT LOW VOLTAGE     | V <sub>LI</sub>   | -         | 0                  | -    | 0.3V <sub>DD</sub> | V                 |
| OPERATING CURRENT     | I <sub>DD</sub>   | -         | -                  | 110  | 150                | mA                |
| LED OPERATING VOLTAGE | V <sub>LED</sub>  | -         | 19.6               | 21.7 | 23.8               | V                 |
| OPERATING CURRENT     | I <sub>FLED</sub> | -         | -                  | 40   | -                  | mA                |
| POWER CONSUMPTION     | P <sub>D</sub>    | -         | -                  | 1230 | -                  | mW                |
| BRIGHTNESS            | L                 | -         | 280                | 350  | -                  | cd/m <sup>2</sup> |

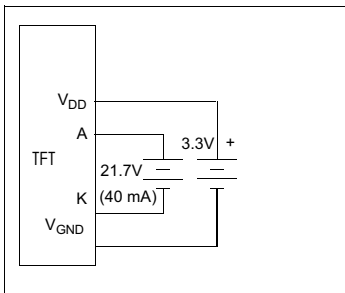
### Physical Data

- Module Size.....129.00W x85.80H x1.9 T mm
- Viewing Area Size.....109.0W x65.8 H mm
- Dot Pitch.....0.135W x 0.135H mm
- Weight.....TBD

### Pin Connections

| PIN NO. | SYMBOL | FUNCTION             |
|---------|--------|----------------------|
| 1       | VLED - | LED Cathode          |
| 2       | VLED + | LED Anode            |
| 3       | GND    | Ground               |
| 4       | VDD    | + 3.3V Power Supply  |
| 5       | R0     | Red Data Bit 0       |
| 6       | R1     | Red Data Bit 1       |
| 7       | R2     | Red Data Bit 2       |
| 8       | R3     | Red Data Bit 3       |
| 9       | R4     | Red Data Bit 4       |
| 10      | R5     | Red Data Bit 5       |
| 11      | R6     | Red Data Bit 6       |
| 12      | R7     | Red Data Bit 7       |
| 13      | G0     | Green Data Bit 0     |
| 14      | G1     | Green Data Bit 1     |
| 15      | G2     | Green Data Bit 2     |
| 16      | G3     | Green Data Bit 3     |
| 17      | G4     | Green Data Bit 4     |
| 18      | G5     | Green Data Bit 5     |
| 19      | G6     | Green Data Bit 6     |
| 20      | G7     | Green Data Bit 7     |
| 21      | B0     | Blue Data Bit 0      |
| 22      | B1     | Blue Data Bit 1      |
| 23      | B2     | Blue Data Bit 2      |
| 24      | B3     | Blue Data Bit 3      |
| 25      | B4     | Blue Data Bit 4      |
| 26      | B5     | Blue Data Bit 5      |
| 27      | B6     | Blue Data Bit 6      |
| 28      | B7     | Blue Data Bit 7      |
| 29      | GND    | Ground               |
| 30      | CLK    | Data Clock           |
| 31      | DISP   | Display ON/OFF (H/L) |
| 32      | NC     | No Connect           |
| 33      | NC     | No Connect           |
| 34      | DE     | Data Enable          |
| 35      | NC     | No Connect           |
| 36      | GND    | GND                  |
| 37-40   | NC     | No Connection        |

### Power Supply



### Absolute Maximum Ratings

| PARAMETER               | SYMBOL           | MIN  | MAX                  | UNIT |
|-------------------------|------------------|------|----------------------|------|
| SUPPLY VOLTAGE          | V <sub>DD</sub>  | -0.5 | 5.0                  | V    |
| BACKLIGHT CURRENT (LED) | I <sub>LED</sub> | -    | 50                   | mA   |
| INPUT VOLTAGE           | V <sub>IN</sub>  | -0.3 | V <sub>DD</sub> +0.3 | V    |
| OPERATING TEMPERATURE   | T <sub>OP</sub>  | -20  | 70                   | °C   |
| STORAGE TEMPERATURE     | T <sub>STG</sub> | -30  | 80                   | °C   |

