



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.: WF50FTWAGDNN0#

General Specifications

| Item | Dimension | Unit |
|------------------|-----------------------------------|------|
| Size | 5.0 | inch |
| Dot Matrix | 800 × 3(RGB) × 480 | dots |
| Module dimension | 120.7(W) × 75.8(H) × 2.8mm | mm |
| Active area | 108(W) × 64.8 (H) mm | mm |
| Dot pitch | 0.135(W) × 0.135(H) mm | mm |
| LCD type | TFT, Normally Black, Transmissive | |
| View Direction | 80/80/80/80 | |
| Aspect Ratio | 16:9 | |
| Driver IC | ST7262 or equivalent | |
| Interface | 24 bit R.G.B. | |
| Backlight Type | LED, Normally White | |
| Touch Panel | Without Touch Panel | |
| Surface | Anti-Glare | |

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

| Item | Symbol | Min | Typ | Max | Unit |
|-----------------------|--------|-----|-----|-----|------|
| Operating Temperature | TOP | -30 | — | +80 | °C |
| Storage Temperature | TST | -30 | — | +80 | °C |

Electrical Characteristics

Typical Operation Conditions

| Item | Symbol | Values | | | Unit |
|---------------------------|--------|---------|------|---------|------|
| | | Min. | Typ. | Max. | |
| Power voltage | VDD | 3.0 | 3.3 | 3.6 | V |
| Current for Driver(Black) | IDD | - | 65 | 97.5 | mA |
| Input logic high voltage | VIH | 0.7 VDD | - | VDD | V |
| Input logic low voltage | VIL | 0 | - | 0.3 VDD | |

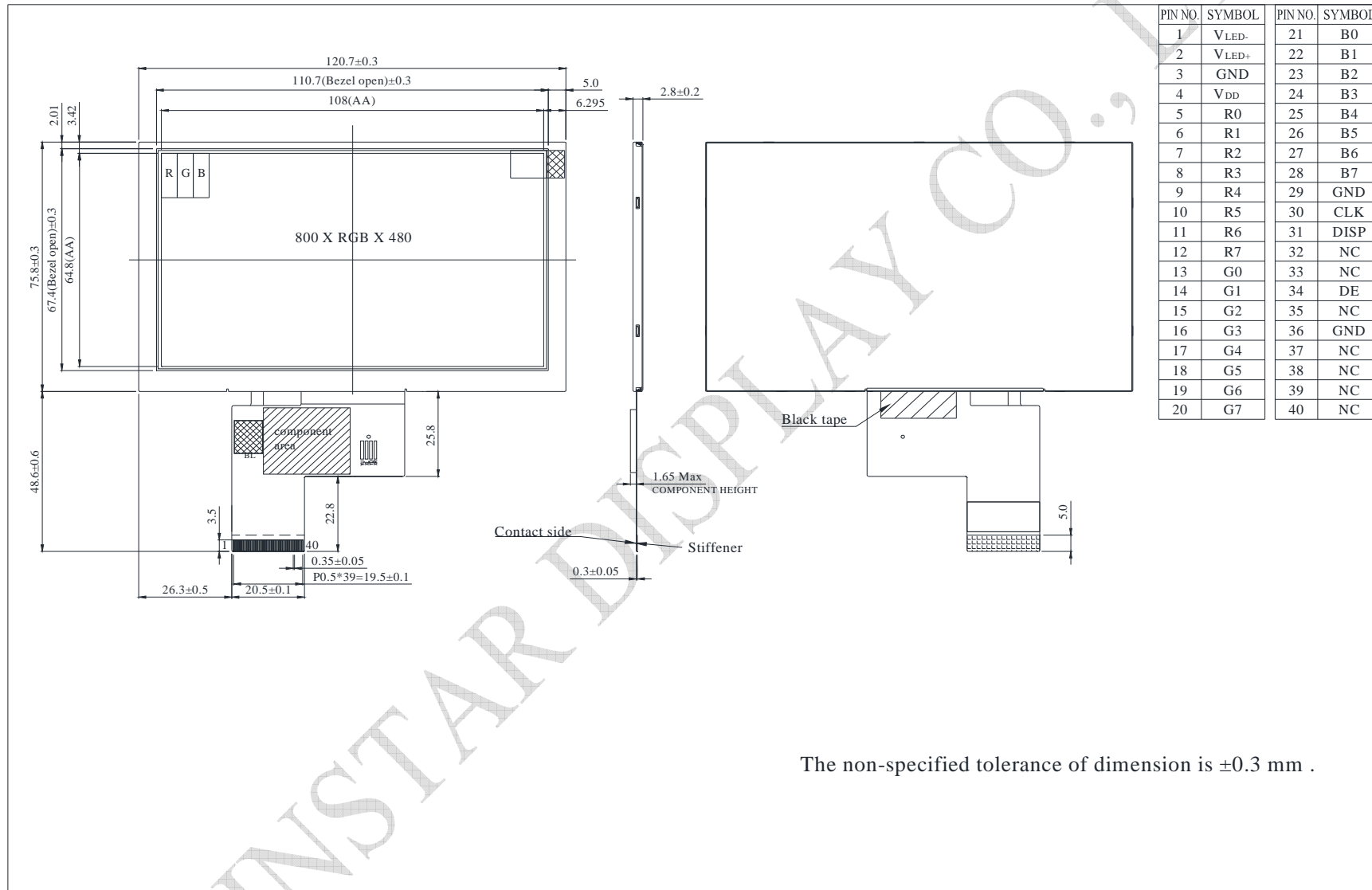
Interface

LCM PIN Definition

FPC Connector is used for the module electronics interface.

| Pin | Symbol | Function |
|-----|--------|-----------------------------------|
| 1 | VLED- | Power for LED backlight (Cathode) |
| 2 | VLED+ | Power for LED backlight (Anode) |
| 3 | GND | Power Ground |
| 4 | VDD | Power voltage |
| 5 | R0 | Red data (LSB) |
| 6 | R1 | Red data |
| 7 | R2 | Red data |
| 8 | R3 | Red data |
| 9 | R4 | Red data |
| 10 | R5 | Red data |
| 11 | R6 | Red data |
| 12 | R7 | Red data(MSB) |
| 13 | G0 | Green data(LSB) |
| 14 | G1 | Green data |
| 15 | G2 | Green data |
| 16 | G3 | Green data |
| 17 | G4 | Green data |
| 18 | G5 | Green data |
| 19 | G6 | Green data |
| 20 | G7 | Green data(MSB) |
| 21 | B0 | Blue data(LSB) |
| 22 | B1 | Blue data |
| 23 | B2 | Blue data |
| 24 | B3 | Blue data |
| 25 | B4 | Blue data |
| 26 | B5 | Blue data |
| 27 | B6 | Blue data |
| 28 | B7 | Blue data(MSB) |
| 29 | GND | Power Ground |
| 30 | CLK | Sample clock |
| 31 | DISP | Display on/off |
| 32 | NC | No connection |
| 33 | NC | No connection |
| 34 | DE | Data input enable |
| 35 | NC | No connection |
| 36 | GND | Power Ground |
| 37 | NC | No connection |
| 38 | NC | No connection |
| 39 | NC | No connection |
| 40 | NC | No connection |

Contour Drawing



The non-specified tolerance of dimension is ±0.3 mm .