



RAYSTAR

曜凌光電股份有限公司

Web: www.raystar-optronics.com E-mail: sales@raystar-optronics.com

RFO400C-AYW-MNN

SPECIFICATION

General Specifications

- Size: 3.97 inch
- Dot Matrix: 480 × 3(RGB) × 800 dots
- Module dimension: 57.14(H) × 96.85 (W) × 2.15 mm
- Active area: 51.84(H) × 86.4 (V) mm
- Dot pitch: 0.108(H) × 0.108(V) mm
- LCD type: TFT, Normally Black, Transmissive
- View Direction: IPS
- Aspect Ratio: Portrait
- Interface: MIPI
- Driver IC: ST7701S
- Backlight Type: LED ,Normally White
- Touch Panel: Without Touch Panel
- Surface: Anti-Glare

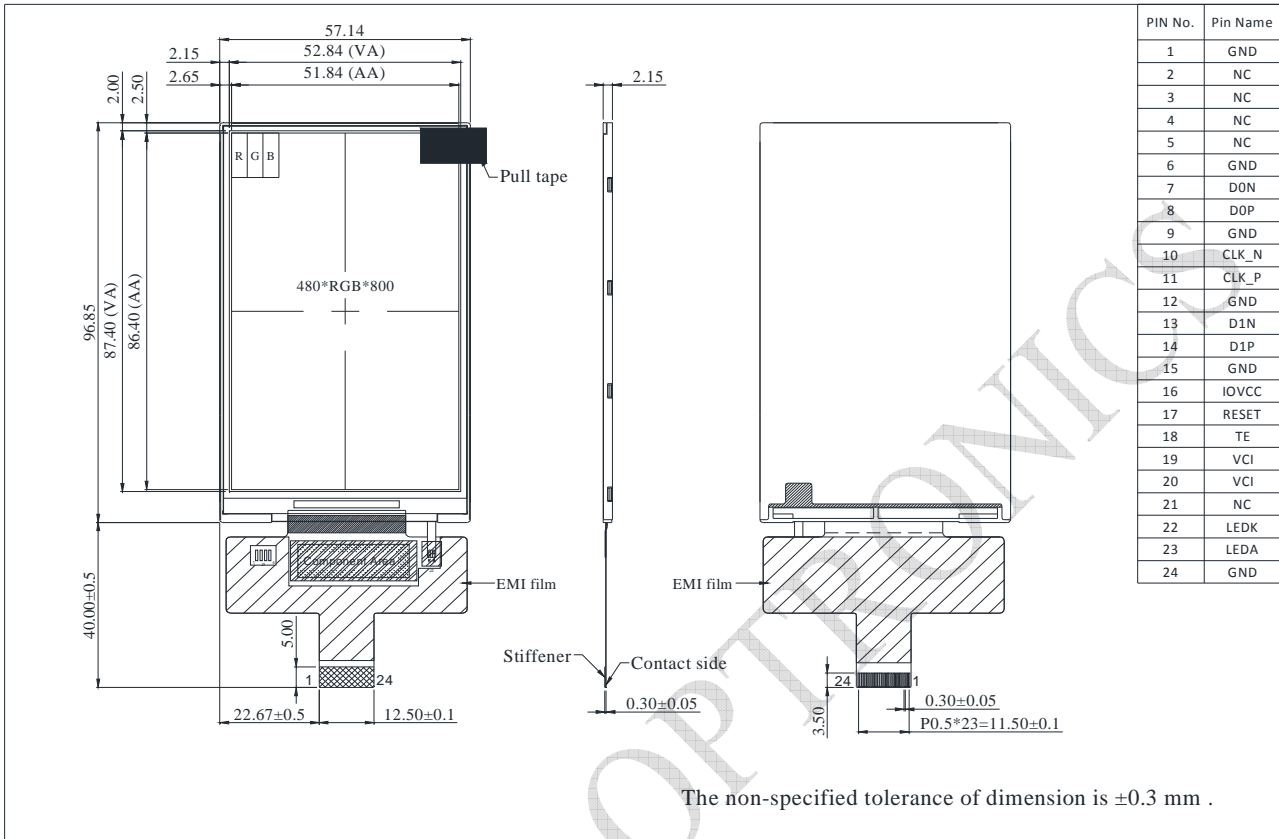
*Color tone slight changed by temperature and driving voltage.

Interface

1. LCM PIN Definition

| Pin | Symbol | Function |
|-----|--------|---|
| 1 | GND | Power ground |
| 2-5 | NC | No connect |
| 6 | GND | Power ground |
| 7 | D0N | MIPI DSI differential data pair (Data lane 0) |
| 8 | D0P | |
| 9 | GND | Power ground |
| 10 | CLK_N | MIPI DSI differential clock pair |
| 11 | CLK_P | |
| 12 | GND | Power ground |
| 13 | D1N | MIPI DSI differential data pair(Data lane 1) |
| 14 | D1P | |
| 15 | GND | Power ground |
| 16 | IOVCC | I/O and interface power supply (1.8V) |
| 17 | RESET | Reset input |
| 18 | TE | Tearing effect output pin. |
| 19 | VCI | Analog power supply |
| 20 | VCI | Analog power supply |
| 21 | NC | No connect |
| 22 | LEDK | Power for LED backlight cathode |
| 23 | LEDA | Power for LED backlight anode |
| 24 | GND | Power ground |

Contour Drawing



RAYSTAR OPTOELECTRONICS

Absolute Maximum Ratings

| Item | Symbol | Min | Typ | Max | Unit |
|-----------------------|--------|-----|-----|-----|------|
| Operating Temperature | TOP | -20 | — | +70 | °C |
| Storage Temperature | TST | -30 | — | +80 | °C |

Electrical Characteristics

1. Typical Operation Conditions

| Item | Symbol | Values | | | Unit |
|---------------------------|--------|--------|-----|------|------|
| | | Min | Typ | Max | |
| Interface Supply Voltage | VCI | 2.8 | - | 3.3 | V |
| Power voltage | IOVCC | 1.65 | 1.8 | 3.3 | V |
| Current for Driver(White) | IDD | - | 11 | 16.5 | mA |

2. Backlight Driving Conditions

| Parameter | Symbol | Min | Typ | Max | Unit |
|---------------|--------|--------|-----|-----|------|
| LED current | ILED | - | 40 | - | mA |
| LED voltage | VLED+ | 13.5 | 15 | 17 | V |
| LED Life Time | | 50,000 | - | - | Hr |