

# TFT DISPLAY SPECIFICATION



RAYSTAR

RAYSTAR Optronics, Inc.  
曜凌光電股份有限公司



曜凌光電股份有限公司  
Raystar Optronics, Inc.

T: +886-4-2565-0761 | F: +886-4-2565-0760

[salescontact@raystar-optronics.com](mailto:salescontact@raystar-optronics.com) | [www.raystar-optronics.com](http://www.raystar-optronics.com)

---

## RFA6400E-AWH-MNN

### General Specifications

- Size: 4-inch
- Dot Matrix: 480 × 3 (RGB) × 480 dots
- Module Dimension: 78.8 (H) × 82.95 (W) × 4.77 (D) mm
- Active Area: 71.856 (H) × 70.176 (V) mm
- Dot Pitch: 0.1497 (H) × 0.1462 (V) mm
- LCD Type: TFT, Normally Black, Transmissive
- View Direction: 80/80/80/80
- Aspect Ratio: 1:1
- Interface: 2-Lanes MIPI
- Driver IC: ST7701S
- Backlight Type: LED, Normally White
- Touch Panel: Without Touch Panel
- Surface: Glare

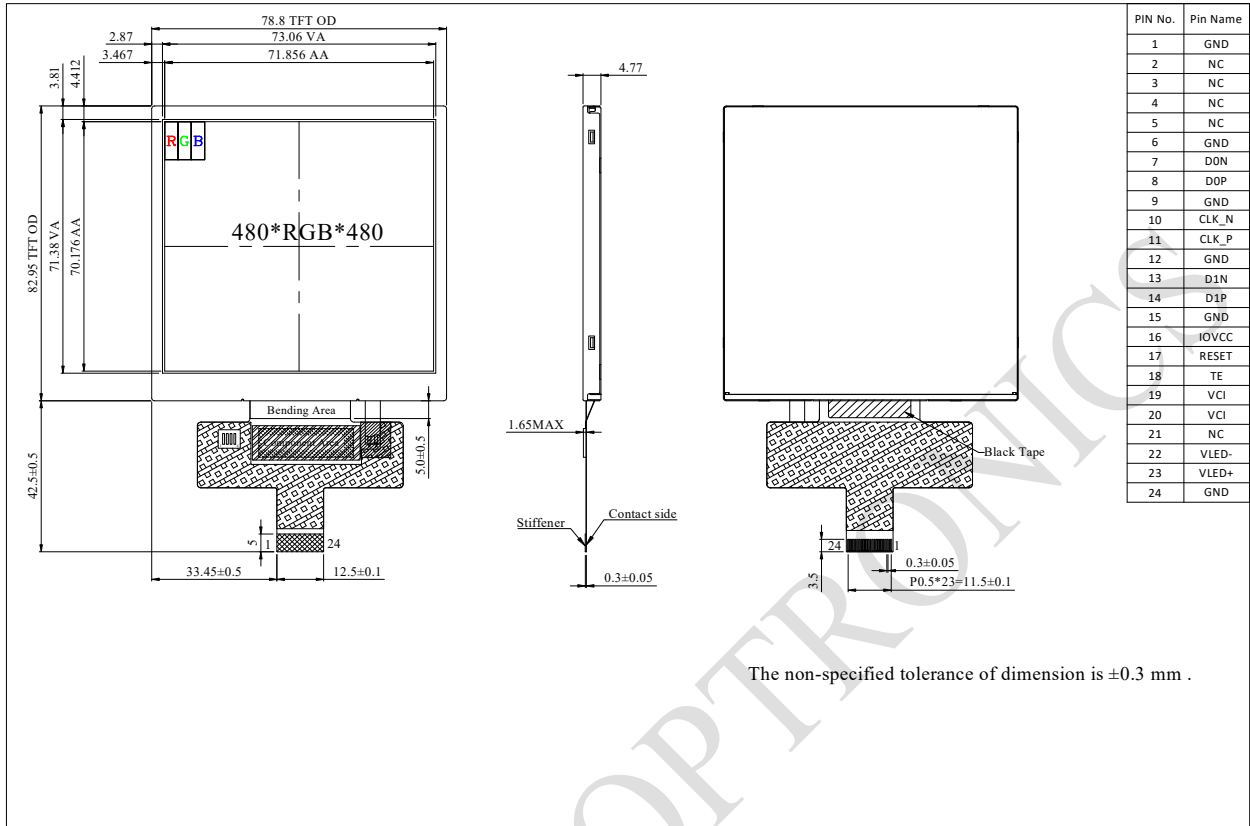
\*Color tone slight changed by temperature and driving voltage.

# Interface

## LCM Pin Definition

Pin No.	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	VLED-	Power for LED backlight cathode
23	VLED+	Power for LED backlight anode
24	GND	Power ground

# Contour Drawing



RAYSTAR OPTRO

## 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	
Interface Supply Voltage	VCI	2.5	2.8	3.6	V
Power Voltage	IOVCC	1.65	1.8	3.3	V
Current for Driver (White)	I <sub>vci</sub>	-	39	58	mA
	I <sub>iovcc</sub>	-	11	16.5	mA

### Backlight Driving Conditions

Parameter	Symbol	Min	Typ	Max	Unit
LED Current	I <sub>LED</sub>	-	120	-	mA
LED Voltage	V <sub>LED+</sub>	13.5	15	17	V
LED Life Time	-	50,000	-	-	Hr