

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
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SPECIFICATION

MODULE NO.: WF50FTWAGLNN0#

General Specification

Item	Dimension	Unit
Size	5.0	inch
Dot Matrix	800 × 3(RGB) × 480	dots
Module dimension	120.7(W) × 75.8(H) × 2.8	mm
Active area	108(W) × 64.8 (H)	mm
Pixel pitch	0.135(W) × 0.135(H)	mm
LCD type	TFT, Normally Black, Transmissive	
View Direction	80/80/80/80	
Aspect Ratio	5:3	
Driver IC	ST7262 or equivalent	
Interface	LVDS	
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

1. Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	VCC	3.1	3.3	3.6	V
Power voltage	VCCI	3.1	3.3	3.6	V
Current for Driver(Black)	ICC	-	67.6	102	mA

2. Backlight Driving Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Voltage for LED backlight	VL	16.8	19.2	20.4	V
Current for LED backlight	IL	--	60	--	mA
LED life time	-	--	50,000	-	Hr

Interface

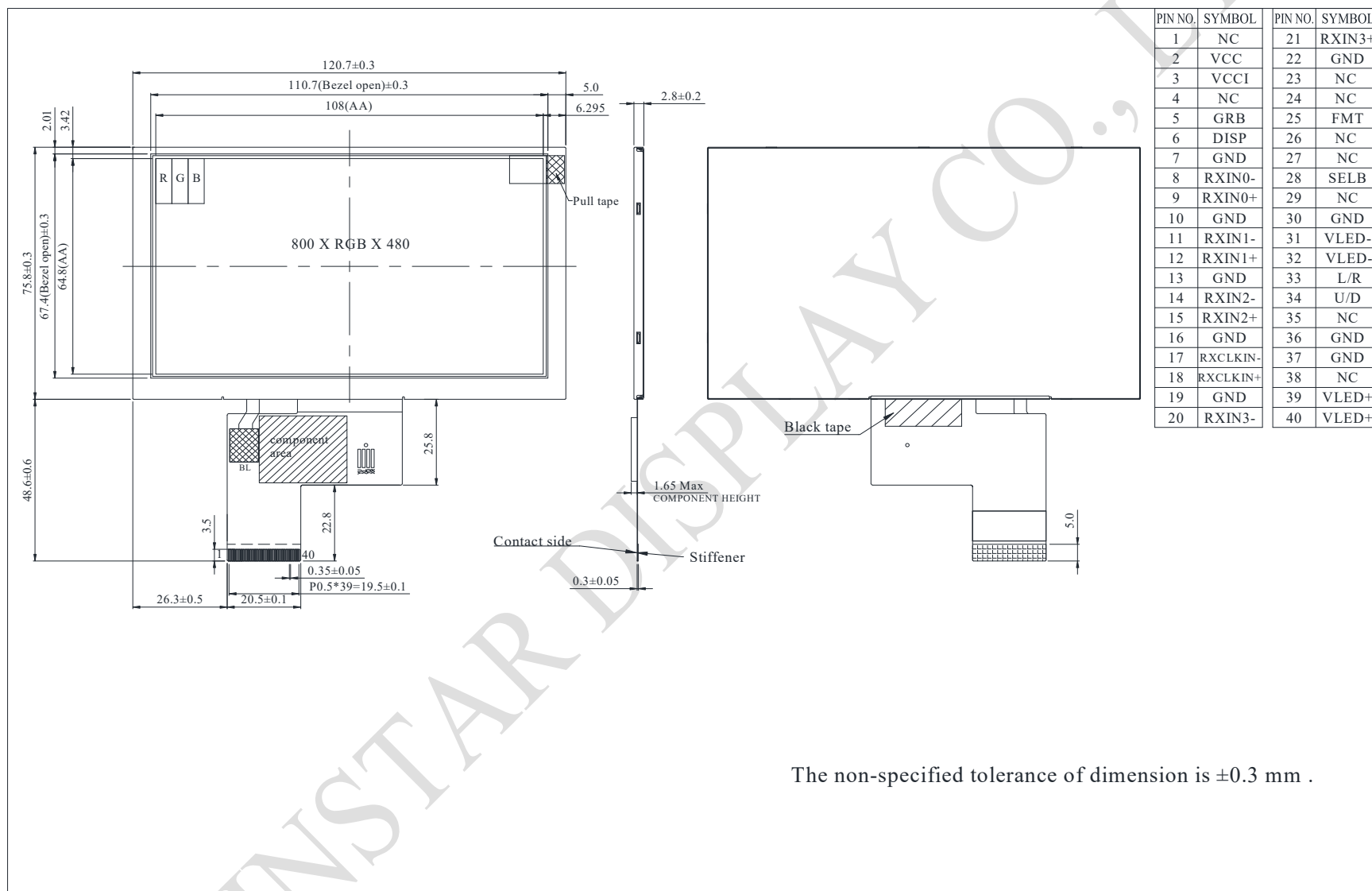
1. LCM PIN Definition

FPC Connector is used for the module electronics interface.

Pin	Symbol	Function
1	NC	No connection
2	VCC	Power voltage
3	VCCI	Power supply for digital I/O pins.
4	NC	No connection
5	GRB	Global reset pin. When GRB is “L” , internal initialization procedure is executed
6	DISP	Display on/off
7	GND	Power Ground
8	RXIN0-	LVDS input lane: RX0-/ RX0+ (RX0N/RX0P)
9	RXIN0+	
10	GND	Power Ground
11	RXIN1-	LVDS input lane: RX1-/ RX1+(RX1N/RX1P)
12	RXIN1+	
13	GND	Power Ground
14	RXIN2-	LVDS input lane: RX2-/ RX2+(RX2N/RX2P)
15	RXIN2+	
16	GND	Power Ground
17	RXCLKIN-	LVDS input lane, detail pin define please refer to LVDS Input Pin Mapping Table. (DCLKN/ DCLKP)
18	RXCLKIN+	
19	GND	Power Ground
20	RXIN3-	LVDS input lane: RX3-/ RX3+(RX3N/RX3P)
21	RXIN3+	
22	GND	Power Ground
23-24	NC	No connection
25	FMT	FMT sets LVDS data format. L : VESA Mode (Default) H : JEIDA Mode
26-27	NC	No connection
28	SELB	SELB LVDS 3- / 4- lane. L : 3-lane H : 4-lane(Default)

29	NC	No connection
30	GND	Power Ground
31-32	VLED-	Power for LED backlight (Cathode)
33	L/R	Horizontal scan direction control pin. L : From right to left. H : From left to right.(Default)
34	U/D	Vertical scan direction control pin. L : From down to up. H : From up to down. (Default)
35	NC	No connection
36-37	GND	Power Ground
38	NC	No connection
39-40	VLED+	Power for LED backlight (Anode)

Contour Drawing



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