



**WINSTAR Display Co.,Ltd.**  
**華凌光電股份有限公司**



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### SPECIFICATION

**MODULE NO.: WF50ETWAGDNN0#**

### General Specifications

Item	Dimension	Unit
Size	5.0	inch
Dot Matrix	800 × 3(RGB) × 480	dots
Module dimension	121.0(W) × 77.4(H) × 3.0(D)	mm
Active area	108(W) × 64.8 (H)	mm
Dot pitch	0.045(W) × 0.135(H)	mm
LCD type	TFT, Normally Black, Transmissive	
View Direction	Wide View	
Aspect Ratio	16:9	
TFT Driver IC	HX8249-A+ HX8678-C,	
TFT Interface	RGB-24bit	
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	VDD	2.7	3.3	3.6	V
Current for Driver(Black)	IDD	-	150	230	mA

### 2. Backlight Driving Conditions

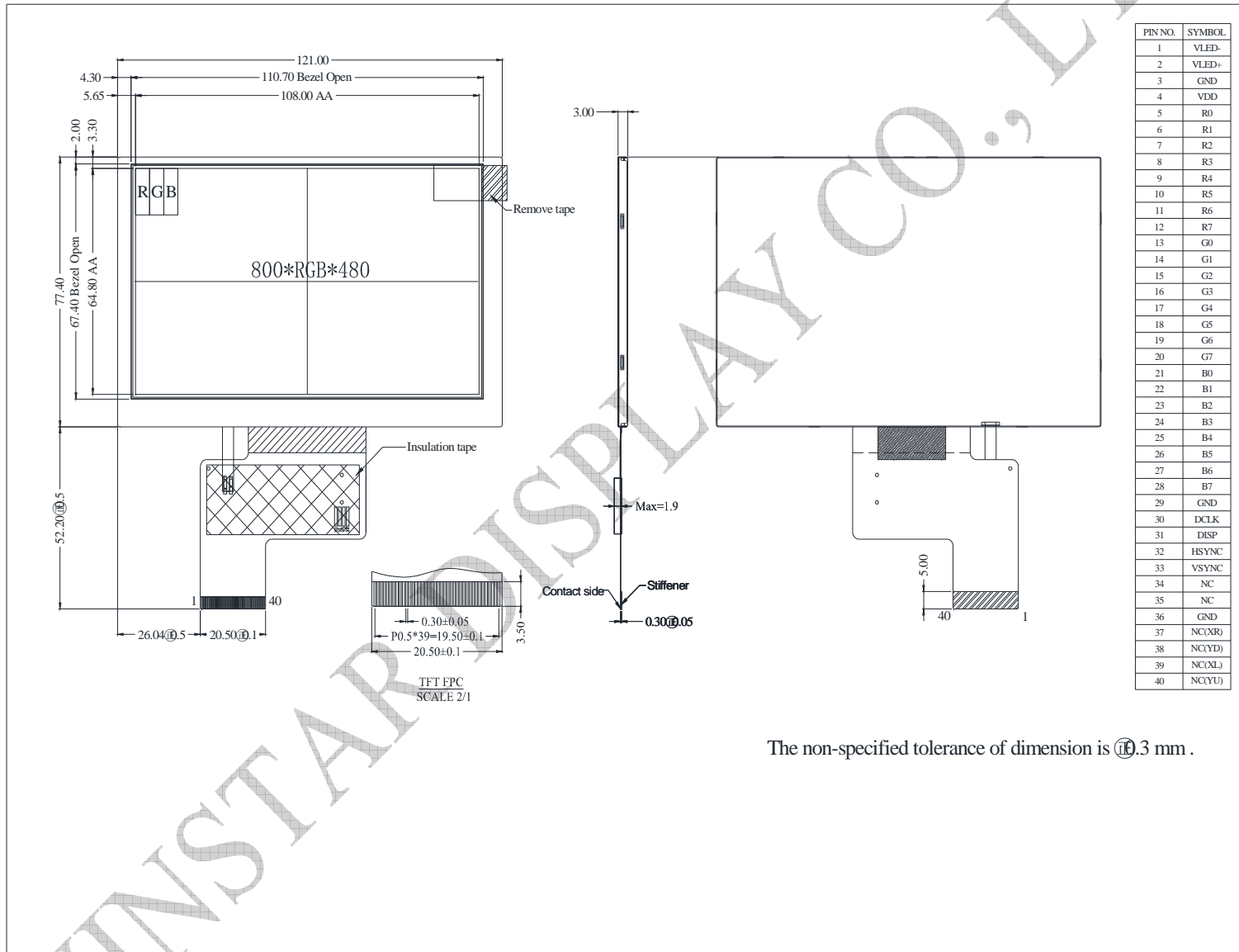
Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Voltage for LED backlight	VL	8.1	9	10.5	V
Current for LED backlight	IL	--	140	--	mA
LED life time	-	--	50,000	-	Hr

# Interface

## 1. LCM PIN Definition

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	DCLK	Sample clock
31	DISP	Display on/off
32	HSYNC	Horizontal sync input
33	VSYNC	Vertical sync input
34	NC	No connection
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  $\pm 0.3$  mm .