



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



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### SPECIFICATION

**MODULE NO.: WF50ATIAGDNN0#**

### General Specifications

Item	Dimension	Unit
Size	5.0	inch
Dot Matrix	800× 3(RGB) × 480	dots
Module dimension	120.7(W) × 76.3(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 White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Aspect Ratio	16:9	
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	-20	—	+70	°C
Storage Temperature	TST	-30	—	+80	°C

# Electrical Characteristics

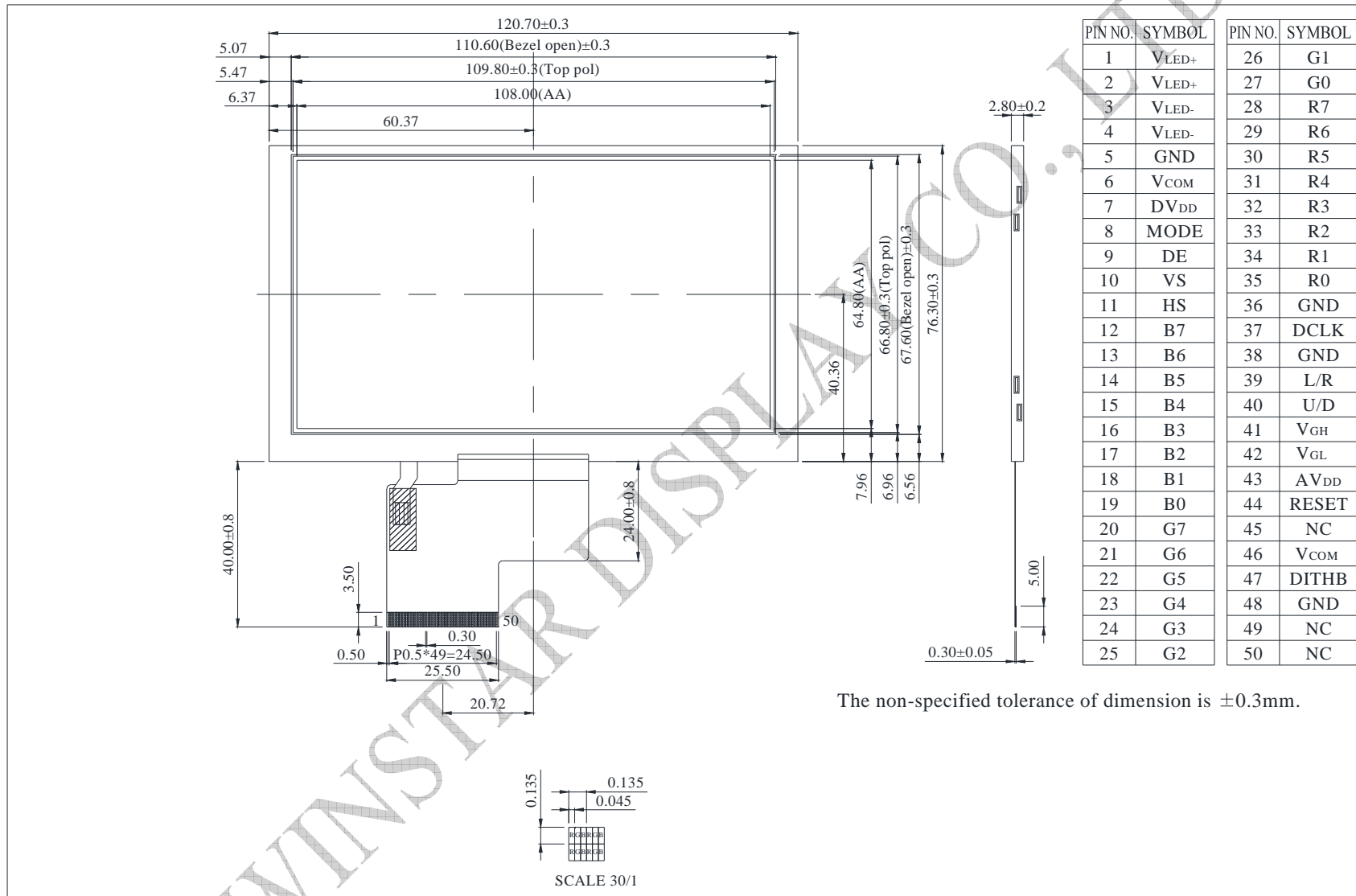
## Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	DVDD	3.0	3.3	3.6	V
	AVdd	10.2	10.4	10.6	V
	Vgh	15.3	16.0	16.7	V
	Vgl	-6.7	-6.0	-5.3	V
Input signal voltage	Vcom	3.09	4.09	5.09	
Input logic high voltage	VIH	0.7 DVdd	—	DVdd	V
Input logic low voltage	VIL	0	—	0.3 DVdd	V

# Interface (LCM PIN Definition)

Pin	Symbol	Function
1~2	VLED+	Power for LED backlight (Anode)
3~4	VLED-	Power for LED backlight (Cathode)
5	GND	Power Ground
6	VCOM	Common voltage
7	DVDD	Power for digital circuit
8	MODE	DE/SYNC mode select
9	DE	Data input enable
10	VS	Vertical sync input
11	HS	Horizontal sync input
12	B7	Blue data(MSB)
13	B6	Blue data
14	B5	Blue data
15	B4	Blue data
16	B3	Blue data
17	B2	Blue data
18	B1	Blue data
19	B0	Blue data(LSB)
20	G7	Green data(MSB)
21	G6	Green data
22	G5	Green data
23	G4	Green data
24	G3	Green data
25	G2	Green data
26	G1	Green data
27	G0	Green data(LSB)
28	R7	Red data(MSB)
29	R6	Red data
30	R5	Red data
31	R4	Red data
32	R3	Red data
33	R2	Red data
34	R1	Red data
35	R0	Red data (LSB)
36	GND	Power Ground
37	DCLK	Sample clock
38	GND	Power Ground
39	L/R	Left/right selection
40	U/D	Up/down selection
41	VGH	Gate ON voltage
42	VGL	Gate OFF voltage
43	AVDD	Power for analog circuit
44	RESET	Global reset pin
45	NC	No connection
46	VCOM	Common voltage
47	DITHB	Dithering function
48	GND	Power Ground
49~50	NC	No connection

# Contour Drawing



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