Winstar Display Co., LTD
華凌光電股份有限公司
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SPECIFICATION

MODULE NO.: WF70-800480RD#0W0-FC

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General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	800 × 3(RGB) × 480	dots
Module dimension	164.9(W) ×100.0(H) ×5.7(D)	mm
Active area	154.08(W) × 85.92(H)	mm
Dot pitch	0.0642(W) × 0.1790(H)	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Backlight Type	LED, Normally White	
With /Without TP	Without TP	
Surface	Anti-Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

Item	Symbol	Values		Unit
		Min.	Max.	
Power voltage	VCC	-0.3	5.0	V
	AVDD	6.5	13.5	V
	VGH	-0.3	40.0	V
	VGL	-20.0	0.3	V
	VGH-VGL	—	40.0	V
Operation Temperature	TOP	-30	85	℃
Storage Temperature	TST	-30	85	℃
LED Reverse Voltage	VR	—	1.2	V
LED Forward Current	IF	—	25	mA

Electrical Characteristics

Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ	Max	
Power voltage	VCC	3.0	3.3	3.6	V
	AVDD	10.2	10.4	10.6	V
	VGH	15.3	16.0	16.7	V
	VGL	-7.7	-7.0	-6.3	V
Input signal voltage	VCOM	2.6	3.6	4.6	V

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Interface

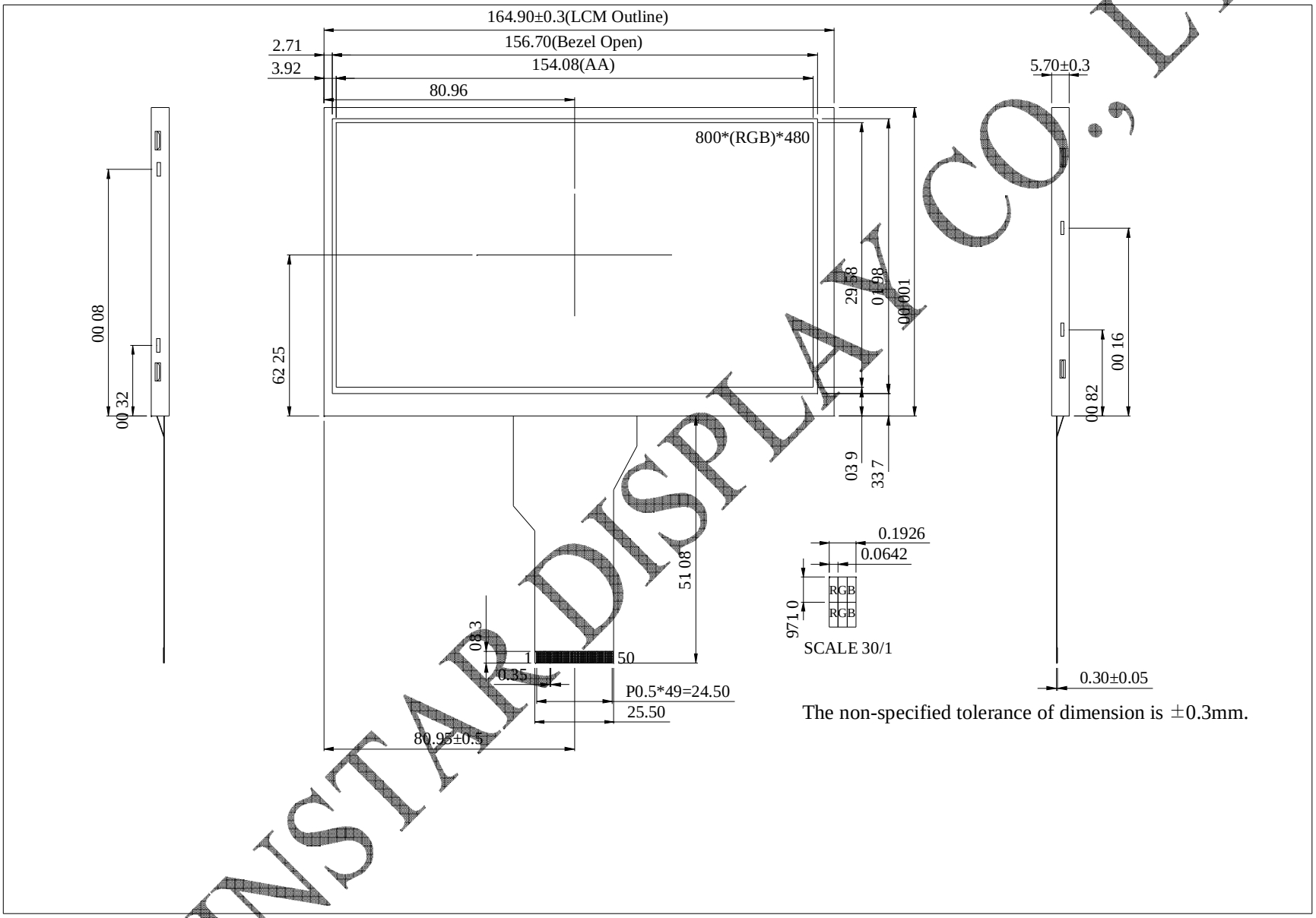
Pin No.	Symbol	I/O	Function
1	VLED+	P	Power for LED backlight (Anode)
2	VLED+	P	Power for LED backlight (Anode)
3	VLED-	P	Power for LED backlight (Cathode)
4	VLED-	P	Power for LED backlight (Cathode)
5	GND	P	Power ground
6	VCOM	I	Common voltage
7	VCC	P	Power for Digital Circuit
8	MODE	I	DE/SYNC mode select
9	DE	I	Data Input Enable
10	VS	I	Vertical Sync Input
11	HS	I	Horizontal Sync Input
12	B7	I	Blue data(MSB)
13	B6	I	Blue data
14	B5	I	Blue data
15	B4	I	Blue data
16	B3	I	Blue data
17	B2	I	Blue data
18	B1	I	Blue data
19	B0	I	Blue data(LSB)
20	G7	I	Green data(MSB)
21	G6	I	Green data
22	G5	I	Green data
23	G4	I	Green data
24	G3	I	Green data
25	G2	I	Green data
26	G1	I	Green data
27	G0	I	Green
28	R7	I	Red data(MSB)
29	R6	I	Red data
30	R5	I	Red data
31	R4	I	Red data
32	R3	I	Red data
33	R2	I	Red data
34	R1	I	Red data
35	R0	I	Red data(LSB)
36	GND	P	Power Ground
37	DCLK	I	Sample clock
38	GND	P	Power Ground
39	L/R	I	Left / right selection
40	U/D	I	Up/down selection
41	VGH	P	Gate ON Voltage
42	VGL	P	Gate OFF Voltage
43	AVDD	P	Power for Analog Circuit
44	RESET	I	Global reset pin.

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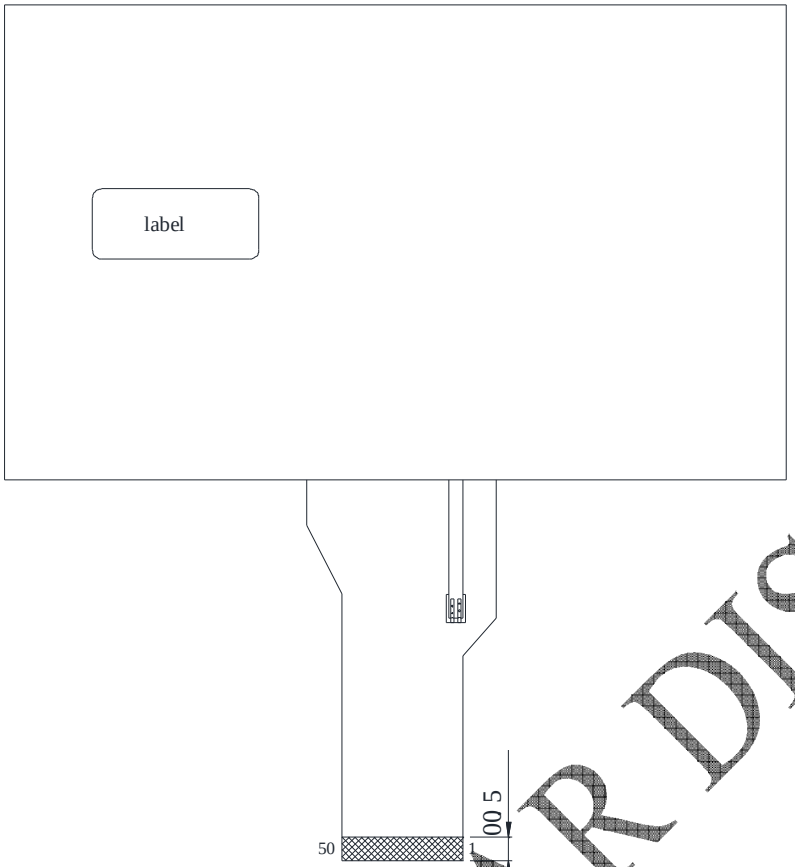
45	NC	-	No connection
46	VCOM	I	Common Voltage
47	DITHB	I	Dithering function
48	GND	P	GND
49	NC	-	No connection
50	NC	-	No connection

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Contour Drawing



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PIN NO.	SYMBOL
1	VLED+
2	VLED+
3	VLED-
4	VLED-
5	GND
6	VCOM
7	VCC
8	MODE
9	DE
10	VS
11	HS
12	B7
13	B6
14	B5
15	B4
16	B3
17	B2
18	B1
19	B0
20	G7
21	G6
22	G5
23	G4
24	G3
25	G2

PIN NO.	SYMBOL
26	G1
27	G0
28	R7
29	R6
30	R5
31	R4
32	R3
33	R2
34	R1
35	R0
36	GND
37	DCLK
38	GND
39	L/R
40	U/D
41	VGH
42	VGL
43	AVDD
44	RESET
45	NC
46	VCOM
47	DITHB
48	GND
49	NC
50	NC

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

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