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

MODULE NO.: WF50-7201280DM#0SP0-FC

General Specifications

Item	Dimension	Unit
Size	5.0	inch
Dot Matrix	720 × 3(RGB) ×1280	dots
Module dimension	68.4 (W) × 122.7 (H) ×4.15	mm
Active area	62.1 (W) × 110.4 (H)	mm
Dot pitch	0.08625(W) ×0.08625(H)	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing angle	80/80/80/80	
TFT Drive IC	ILI9881C or Equivalent	
TFT Interface	MIPI	
Aspect Ratio	16:9	
Backlight Type	LED, Normally White	
Touch Panel	Without Touch Panel	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

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Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-20	—	+70	℃
Storage Temperature	TST	-30	—	+80	℃

Electrical Characteristics

1. Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power supply for analog circuit	VCI	2.5	3.3	3.6	V
Power supply for logic circuit	IOVCC	1.65	1.8	3.6	V
Current for Driver	IDD	-	44	-	mA

2. Backlight Driving Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	ILED	-	150	-	mA
LED voltage	VLED+	18.2	21	23.8	V
LED Life Time		50,000	-	-	Hr

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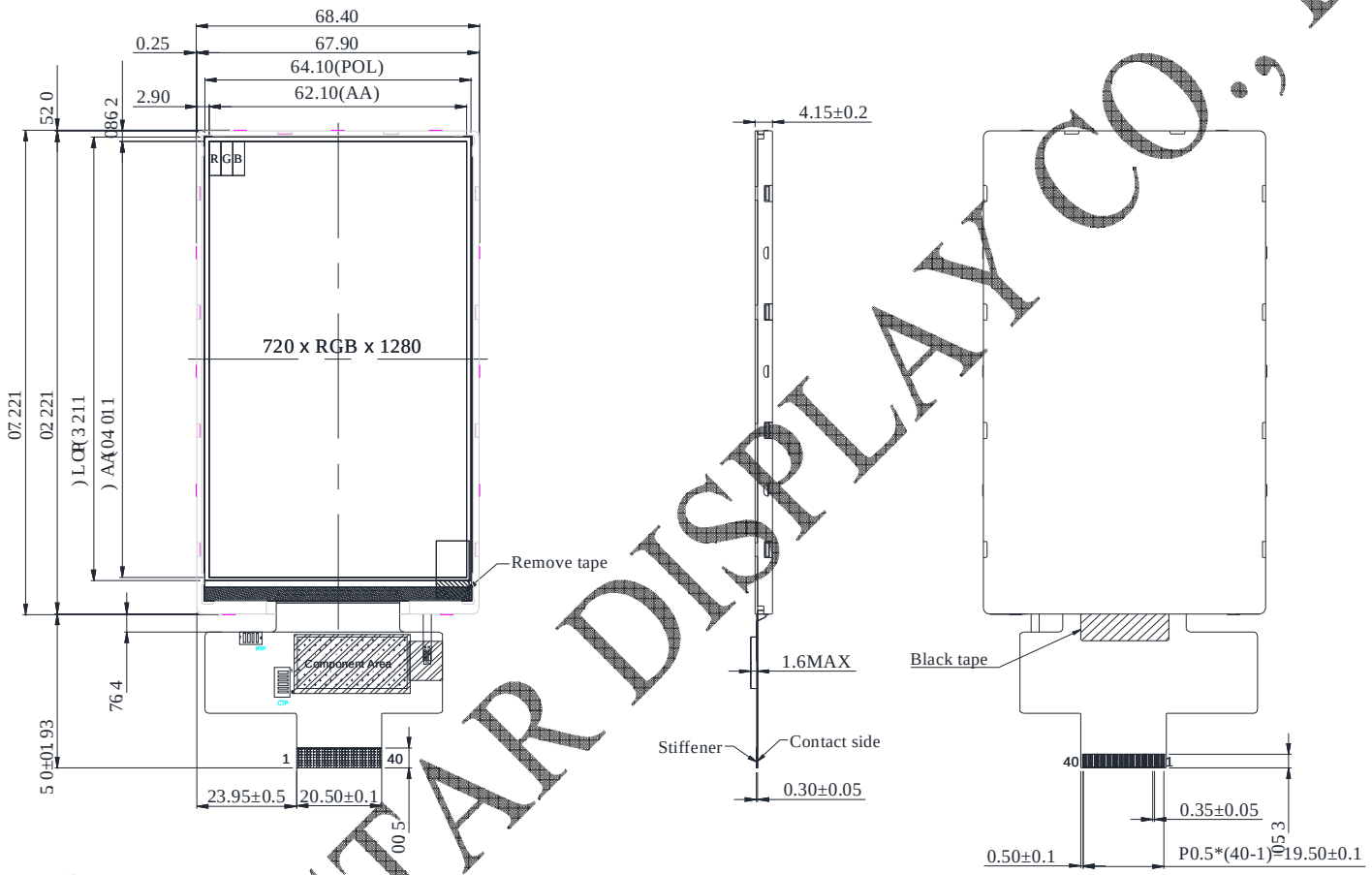
Interface

1. LCM PIN Definition

Pin	Symbol	Function
1-9	NC	No connection
10-11	VCI	Power supply for analog circuits. Connect to an external power supply of 2.5V to 3.6V
12-13	NC	No connection
14	RESET	The external reset input Initializes the chip with a low input. Be sure to execute a power-on reset after supplying power. Fix to VDDI level when not in use.
15	TE	Tearing effect output pin. Leave the pin open when not in use.
16	NC	No connection
17-18	GND	Power ground
19-20	IOVCC	Power supply for analog circuits. Connect to an external power supply of 1.65V to 3.6V
21	GND	Power ground
22	D3P	MIPI DSI differential data pair. (Data lane 3)
23	D3N	
24	GND	Power ground
25	D2P	MIPI DSI differential data pair. (Data lane 2)
26	D2N	
27	GND	Power ground
28	CLKP	MIPI DSI differential clock pair
29	CLKN	
30	GND	Power ground
31	D1P	MIPI DSI differential data pair. (Data lane 1)
32	D1N	
33	GND	Power ground
34	D0P	MIPI DSI differential data pair. (Data lane 0)
35	D0N	
36-37	GND	Power ground
38	LED+	Power for LED backlight anode
39	LED-	Power for LED backlight cathode
40	NC	No connection

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Contour Drawing



PIN No.	Pin Name
1	NC
2	NC
3	NC
4	NC
5	NC
6	NC
7	NC
8	NC
9	NC
10	VCI
11	VCI
12	NC
13	NC
14	RESET
15	TE
16	NC
17	GND
18	GND
19	IOVCC
20	IOVCC
21	GND
22	D3P
23	D3N
24	GND
25	D2P
26	D2N
27	GND
28	CLKP
29	CLKN
30	GND
31	D1P
32	D1N
33	GND
34	D0P
35	D0N
36	GND
37	GND
38	LED+
39	LED-
40	NC

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

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