TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司

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Winstar Display Co., LTD

SPECIFICATION

CUSTOMER : _____

MODULE NO.: WF101-19201200NL#0P0B-FC

APPROVED BY: **(FOR CUSTOMER USE ONLY)**	**PCB VERSION:** **DATA:**

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
			葉虹蘭
ISSUED DATE: 2023/03/21			

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RECORDS OF REVISION	**DOC. FIRST ISSUE**

VERSION	DATE	REVISED PAGE NO.	**SUMMARY**
0	2023/03/21		First issue

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		00：Sales code　0：Version

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Summary

TFT 10.1" is a color active matrix TFT LCD using amorphous silicon TFT's (Thin Film Transistors) as an active switching devices. This module has a 10.1 inch diagonally measured active area with WUXGA resolutions (1920 horizontal by 1200 vertical pixel array). Each pixel is divided into RED, GREEN, BLUE dots which are arranged in vertical stripe and this module can display 16.7M colors.

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General Specifications

Item	Dimension	Unit
Size	10.1	inch
Dot Matrix	1920(H) X RGB X 1200(V)	dots
Module dimension	231.40 x152.3 x 9.1 Max	mm
Active area	216.8064(H) x 135.504(V)	mm
Dot pitch	0.11292(H) x 0.11292(V)	mm
LCD type	TFT, Normally Black, Transmissive	
Interface	2ch-LVDS	
Driver IC	HX8290-B or equivalent	
Viewing Angle	80/80/80/80	
Aspect Ratio	16:10	
Backlight Type	LED,Normally White	
With /Without TP	Without TP	
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	℃

Note: Device is subject to be damaged permanently if stresses beyond those absolute maximum ratings listed above

1. Temp. ≦60℃, 90% RH MAX. Temp.＞60℃, Absolute humidity shall be less than 90% RH at 60℃

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Optical Characteristics

Item		Symbol	Condition.	Min	Typ.	Max.	Unit	Remark
Response time		Tr+Tf	θ=0°、Φ=0°	-	30	35	.ms	Note 3
Contrast ratio		CR	At optimized viewing angle	700	900	-	-	Note 4
Color Chromaticity	White	Wx	θ=0°、Φ=0	0.235	0.285	0.335	-	Note 2,6,7
		Wy		0.277	0.327	0.377	-	
Viewing angle	Hor.	ΘR	CR≧10	70	80	-	Deg.	Note 1
		ΘL		70	80	-		
	Ver.	ΦT		70	80	-		
		ΦB		70	80	-		
Brightness		-	-	400	500	-	cd/m²	Center of display
Uniformity		(U)	-	70	-	-	%	Note 5
NTSC Ratio		NTSC	-	100	-	120	%	Note 8

Ta=25±2℃

Note 1: Definition of viewing angle range

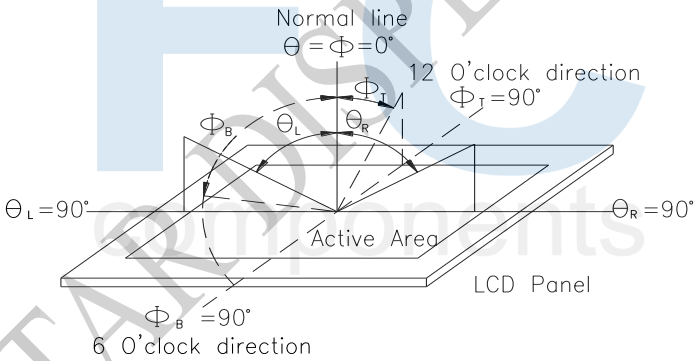
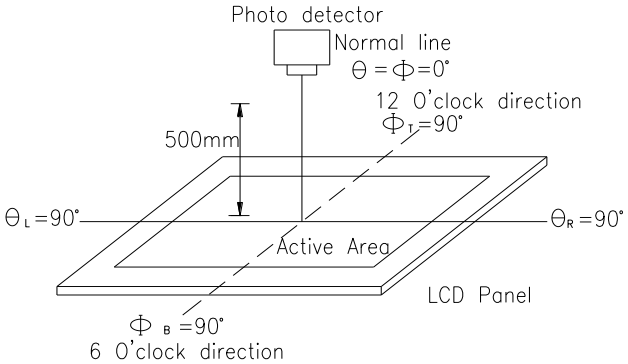


Fig. 8.1. Definition of viewing angle

Note 2: Test equipment setup:

After stabilizing and leaving the panel alone at a driven temperature for 10 minutes, the measurement should be executed. Measurement should be executed in a stable, windless, and dark room. Optical specifications are measured by Topcon BM-7 or BM-5 luminance meter 1.0° field of view at a distance of 50cm and normal direction.



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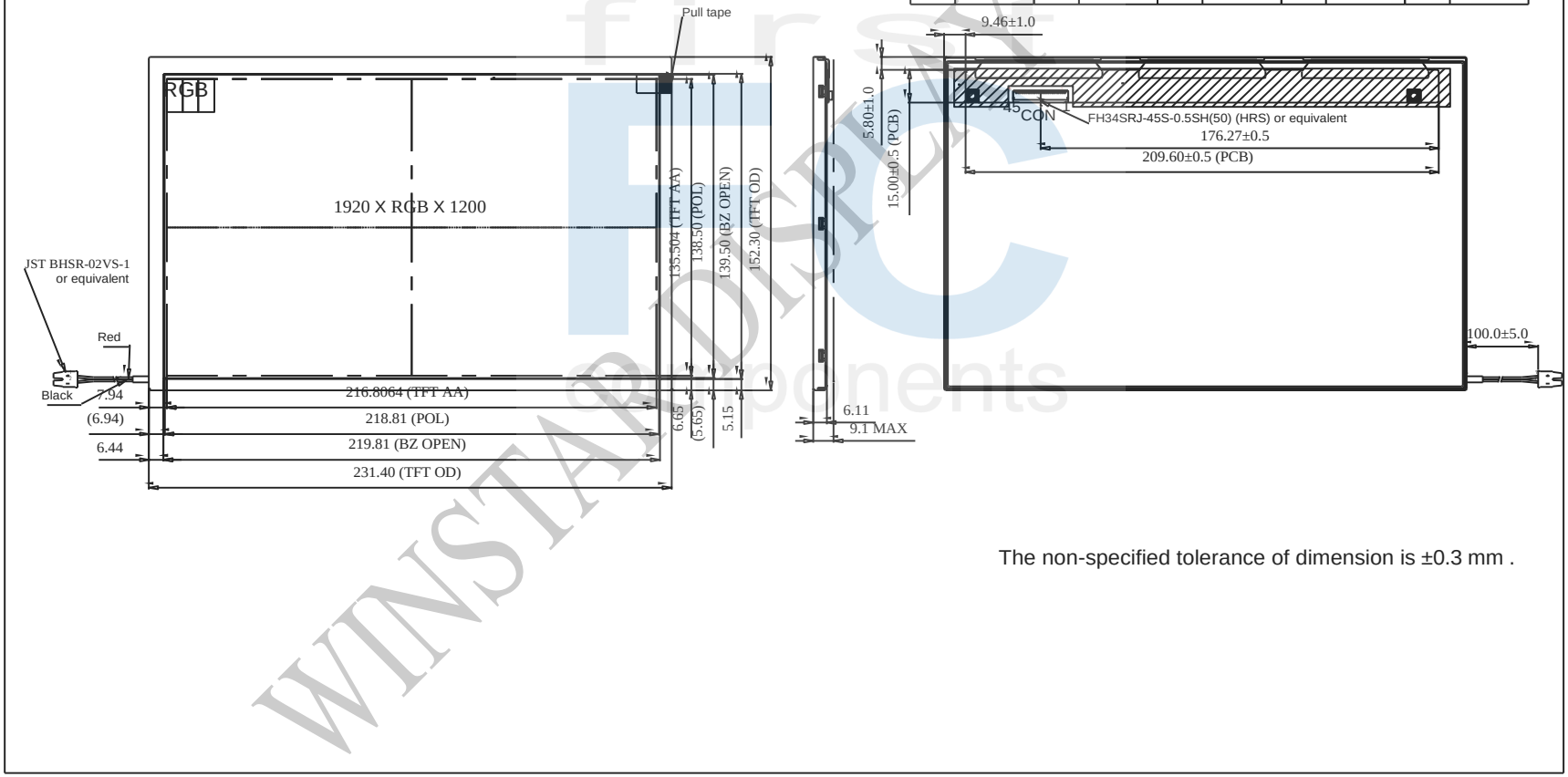
Contour Drawing

BL

PIN NO.	SYMBOL
1	VLED+
2	VLED-

CON

PIN NO.	SYMBOL	PIN NO.	SYMBOL	PIN NO.	SYMBOL	PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	NC	11	ELV2N	21	GND	31	OLV1P	41	VDDIN
2	NC	12	GND	22	OLV3P	32	OLV1N	42	VDDIN
3	NC	13	ELVCLKP	23	OLV3N	33	GND	43	VDDIN
4	NC	14	ELVCLKN	24	GND	34	OLV0P	44	VDDIN
5	NC	15	GND	25	OLV2P	35	OLV0N	45	VDDIN
6	GND	16	ELV1P	26	OLV2N	36	GND		
7	ELV3P	17	ELV1N	27	GND	37	NC		
8	ELV3N	18	GND	28	OLVCLKP	38	NC		
9	GND	19	ELV0P	29	OLVCLKN	39	NC		
10	ELV2P	20	ELV0N	30	GND	40	NC		



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

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