TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.

華凌光電股份有限公司

SPECIFICATION

MODULE NO.: WF0096ATYAA3DNF10#

General Specifications

Item	Dimension	Unit
Size	0.96	inch
Dot Matrix	80 x RGB x 160(TFT)	dots
Module dimension	18.7 (W) x 31.9 (H) x 2.64 (D)	mm
Active area	10.8 x 21.696	mm
Dot pitch	0.135 x 0.1356	mm
LCD type	TFT, Normally black, Transmissive	
Viewing Angle	80/80/80/80	
Aspect Ratio	1:2	
TFT Drive IC	ST7735P or equivalent	
TFT Interface	SPI Interface	
Backlight Type	LED, Normally White	
CTP Interface	I2C	
CTP IC	FT3267 or equivalent	
CTP FW Version	V06	
Touch Panel	With CTP	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

WINSTAR DISPLAY CO.,LTD

Absolute Maximum Ratings

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

Electrical Characteristics

1. Operating conditions:

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage	VCC	3.0	3.3	3.6	V
Supply LCM current	ICC	—	2	3	mA
Supply CTP	VDDT	2.8	—	3.3	V
	I_{VDDT}	—	2	3	mA

2. LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	ILED	—	20	—	mA
LED voltage	VLED	2.8	3.0	3.2	V
LED Life Time		50000	—	—	Hr

WINSTAR DISPLAY CO., LTD

Interface

1. LCM PIN Definition

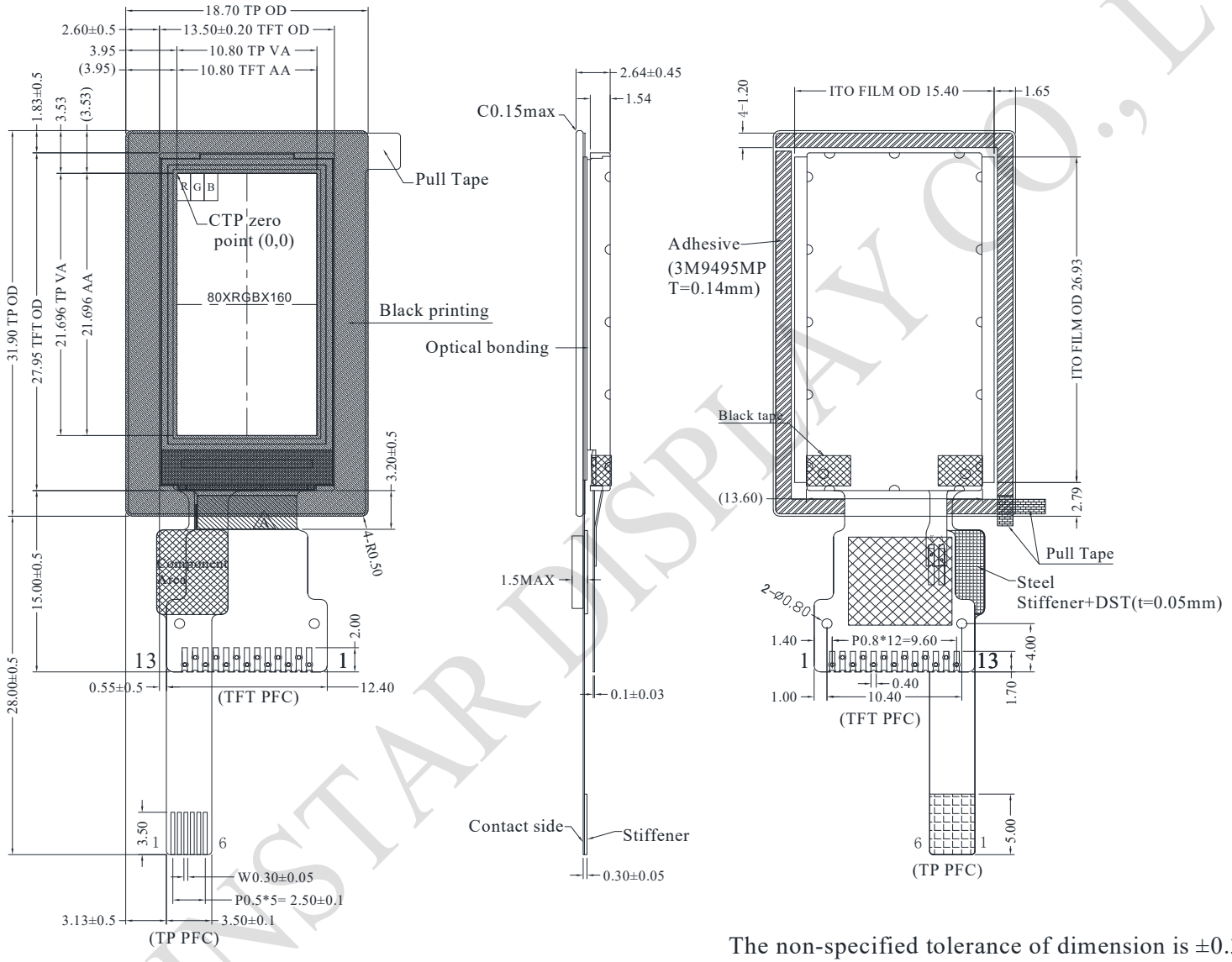
Pin	Symbol	Function
1	SPI4W	SPI4W='0', 3-wire SPI. SPI4W='1', 4-wire SPI.
2	NC	No connection
3	SDA	Serial interface data
4	SCL	Serial interface clock
5	RS	Data/command selection pin (4-wire SPI use)
6	RES	Reset pin (low active)
7	CS	Chip selection pin (low active)
8	GND	Ground
9	NC	No connection
10	VCC	Power supply.
11	VLED-	Back light cathode
12	VLED+	Back light anode
13	GND	Ground

2. CTP PIN Definition

Pin	Symbol	Function
1	VDDT	Power supply
2	SCL	IIC clock signal. Must be pulled high
3	SDA	IIC data signal. Must be pulled high.
4	INT	External interrupt to the host
5	RESET	External Reset. Low is active
6	VSS	Power ground.

WINSTAR DISPLAY CO.,LTD

Contour Drawing



TFT PFC

PIN NO.	SYMBOL
1	SPI4W
2	NC
3	SDA
4	SCL
5	RS
6	RES
7	CS
8	GND
9	NC
10	VCC
11	VLED-
12	VLED+
13	GND

TP PFC

PIN NO.	SYMBOL
1	VDDT
2	SCL
3	SDA
4	INT
5	RESET
6	VSS

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

WINSTAR DISPLAY CO., LTD