TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.

華凌光電股份有限公司

SPECIFICATION

MODULE NO.: WF0096ATYAA3DNNA#

General Specifications

Item	Dimension	Unit
Size	0.96	inch
Dot Matrix	80 x RGB x 160(TFT)	dots
Module dimension	13.5(W) x 27.95(H) x 1.54(D)	mm
Active area	10.8 x 21.696	mm
Pixel 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	
TFT Interface	SPI	
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. Operating conditions:

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage	VCC	3.0	3.3	3.6	V
Supply LCM current	ICC	–	–	2	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

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Interface

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

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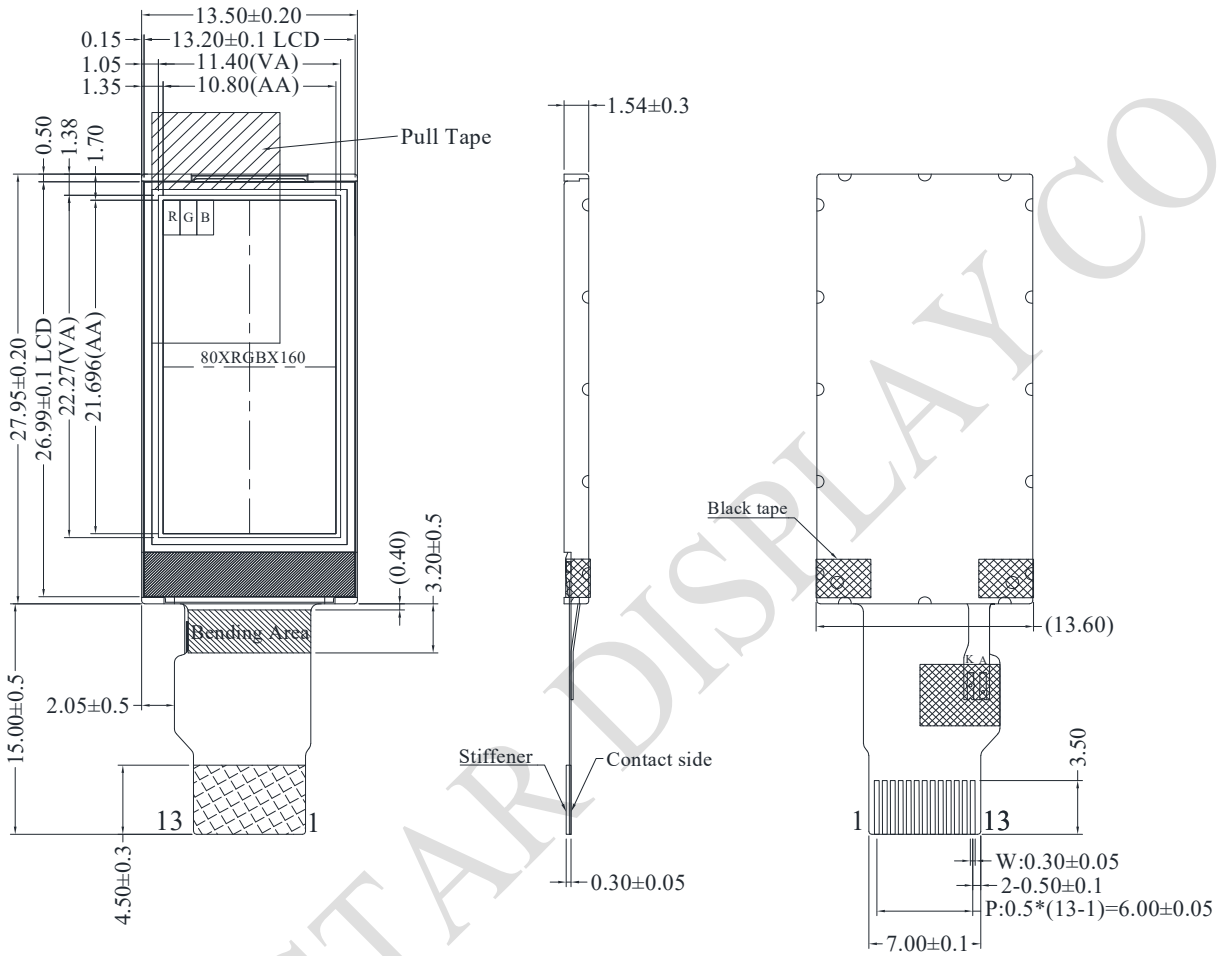
Contour Drawing



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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

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

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