

# TFT DISPLAY SPECIFICATION



**WINSTAR Display Co.,Ltd.**  
**華凌光電股份有限公司**



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### SPECIFICATION

**MODULE NO.: WF0299ATYAC2MNR0#**

### General Specifications

Item	Dimension	Unit
Size	2.99"	inch
Dot Matrix	268 x RGB x 800(TFT)	dots
Module dimension	26.52 (W) x 78.2 (H) x 2.46 (D)	mm
Active area	24.12 x 72.0	mm
Pixel Pitch	0.09 x 0.09	mm
LCD type	TFT, Normally Black, Transmissive	
TFT Interface	2-Lanes MIPI	
TFT Driver IC	GC9503 or Equivalent	
Viewing angle	80/80/80/80	
PCAP Driver IC	CST328 or Equivalent	
PCAP Interface	I2C	
PCAP FW Version	1.0.3	
PCAP Resolution	268*820	
Backlight Type	LED, Normally White	
Touch Panel	With PCAP	
Surface	Glare	

\*Color tone slight changed by temperature and driving voltage.

# Absolute Maximum Ratings

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

# Electrical Characteristics

## Operating conditions

Item	Symbol	Min	Typ	Max	Unit
Supply voltage for analog circuit	VIO28	2.6	2.8	3.6	V
Working current for VIO28	—	—	43.0	65.0	mA
Supply voltage for logic circuit	VIO18	1.65	1.8	3.3	V
Input voltage 'H'level	VIH	0.7*VIO18	—	VIO18	V
Input voltage 'L'level	VIL	GND	—	0.3*VIO18	V
Output voltage 'H'level	VOH	0.8*VIO18	—	VIO18	V
Output voltage 'L'level	VOL	GND	—	0.2*VIO18	V
Supply CTP	CTP_VDD	2.65	2.8	3.3	V
	CTP_IDD	—	7.0	11.0	mA

## LED driving conditions

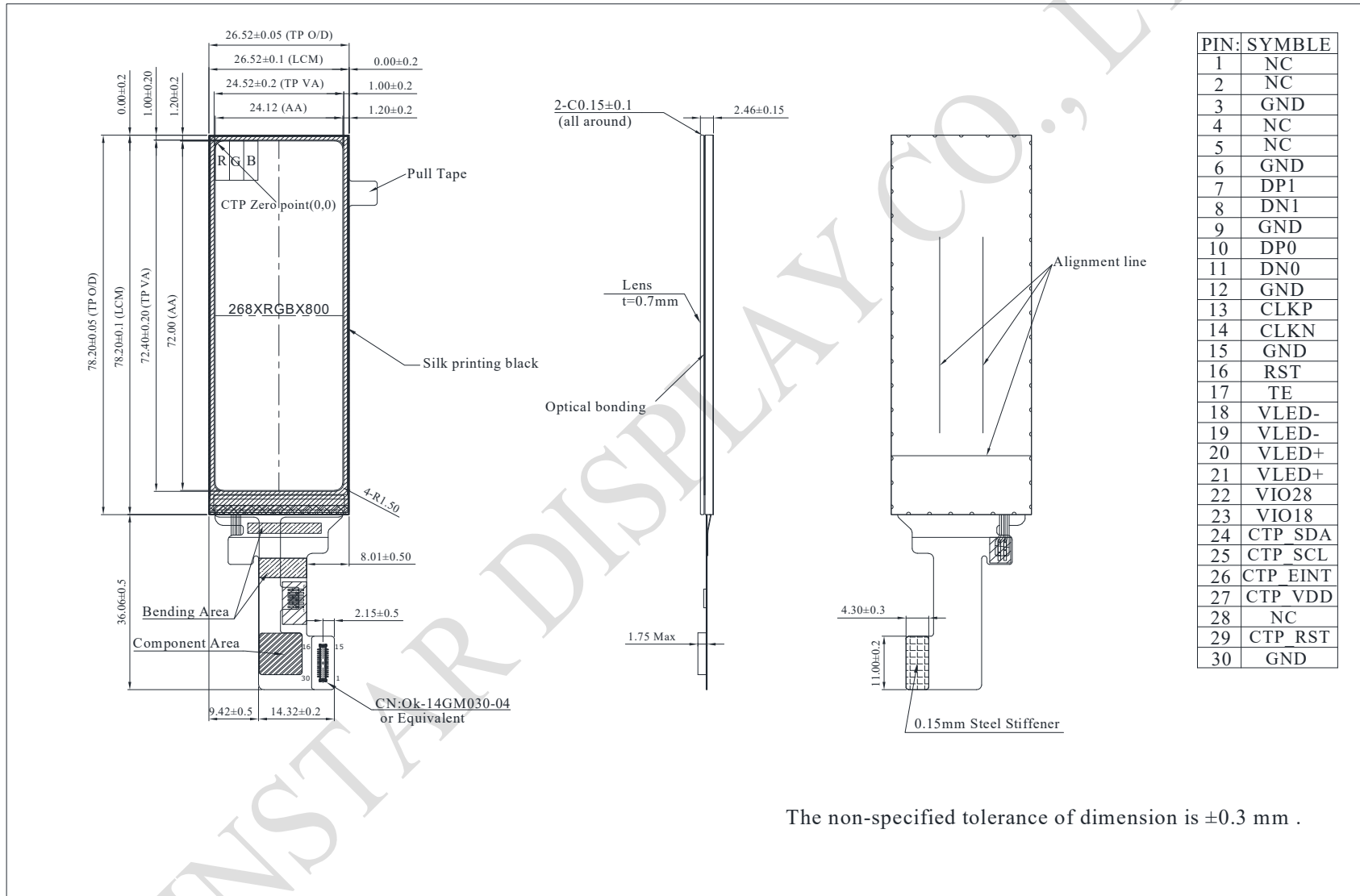
Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	—	—	20	—	mA
LED voltage	VLED+	17.4	18	19.2	V
LED Life Time	—	—	40,000	—	Hr

# Interface

## LCM PIN Definition

Pin No.	Symbol	Description
1	NC	No connection
2	NC	No connection
3	GND	Power ground
4	NC	No connection
5	NC	No connection
6	GND	Power ground
7	DP1	MIPI-DSI data lane 1 positive input pin
8	DN1	MIPI-DSI data lane 1 negative input pin
9	GND	Power ground
10	DP0	MIPI-DSI data lane 0 positive input pin
11	DN0	MIPI-DSI data lane 0 negative input pin
12	GND	Power ground
13	CLKP	MIPI-DSI data lane positive input pin
14	CLKN	MIPI-DSI data lane negative input pin
15	GND	Power ground
16	RST	Reset signal(low active)
17	TE	Serves TE (Tearing Effect ) pin on MPU interface
18	VLED-	LED backlight cathode
19	VLED-	LED backlight cathode
20	VLED+	LED backlight anode
21	VLED+	LED backlight anode
22	VIO28	Analog power supply
23	VIO18	Power supply for the logic power and I/O circuit
24	CTP_SDA	TP-SDA
25	CTP_SCL	TP-SCL
26	CTP_EINT	TP-EINT
27	CTP_VDD	TP-VCC
28	NC	No connection
29	CTP_RST	TP-RESET
30	GND	Power ground

# Contour Drawing



PIN:	SYMBLE
1	NC
2	NC
3	GND
4	NC
5	NC
6	GND
7	DP1
8	DN1
9	GND
10	DP0
11	DN0
12	GND
13	CLKP
14	CLKN
15	GND
16	RST
17	TE
18	VLED-
19	VLED-
20	VLED+
21	VLED+
22	VIO28
23	VIO18
24	CTP_SDA
25	CTP_SCL
26	CTP_EINT
27	CTP_VDD
28	NC
29	CTP_RST
30	GND

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