

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODULE NO.: WF28ETLAJDNT0#

General Specifications

Item	Dimension	Unit
Size	2.8"	
Dot Matrix	240 x RGB x 320(TFT)	dots
Module dimension	50.0(W) x 69.2(H) x 3.6(D)	mm
Active area	43.2 x 57.6	mm
Dot pitch	0.06 x 0.18	mm
LCD type	TFT, Normally White, Transmissive	
TFT Control IC	ILI9341 or equivalent	
TFT Interface	8-bit/16-bit CPU (build in controller)	
View Direction	6 o'clock	
Gray Scale Inversion Direction	12 o'clock	
Aspect Ratio	3:4	
Backlight Type	LED, Normally White	
Touch Panel	Resistive Touch Panel	
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

1. Operating conditions:

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage For Analog	VCI	2.5		3.3	V
Supply Voltage For Logic	IOVCC	1.65		3.3	V
Supply Current For LCM	ICC	—	5	7.5	mA

2. LED driving conditions

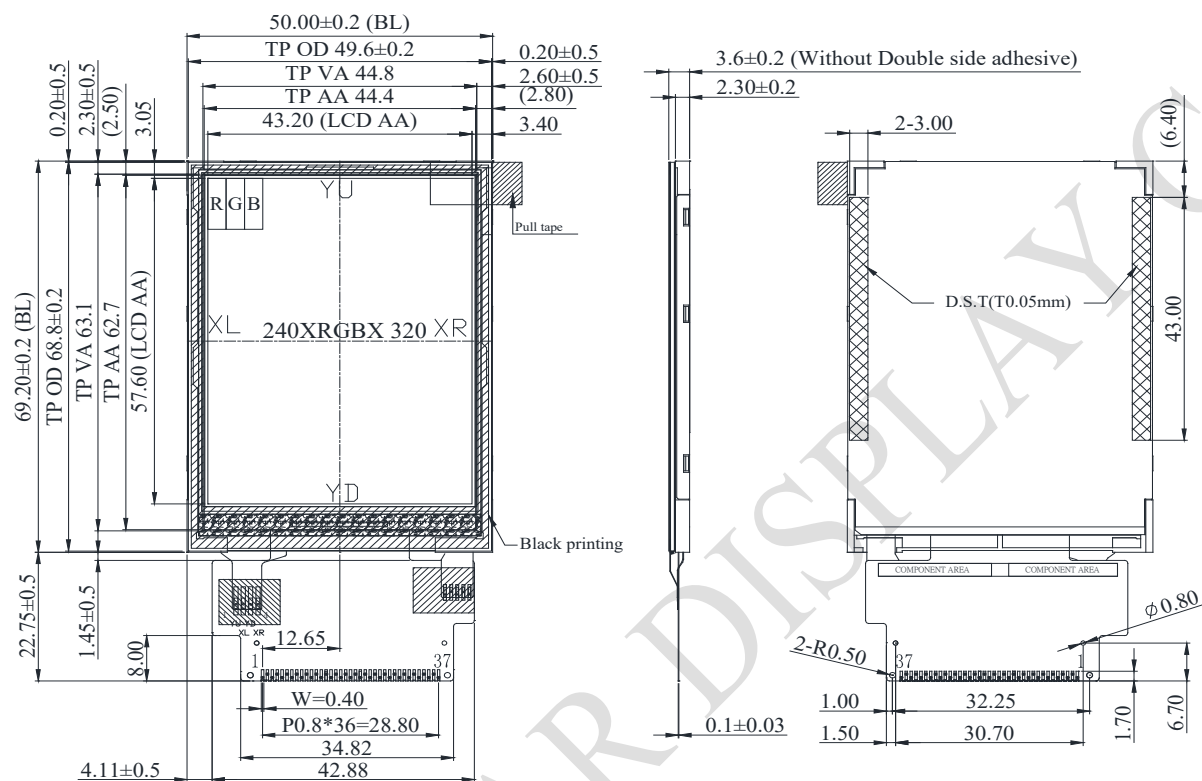
Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current		-	80	-	mA
Power Consumption		224	256	272	mW
LED voltage	VBL+	2.9	3.2	3.4	V
LED Life Time		50,000	—	-	Hr

Interface

1. LCM PIN Definition

NO	Symbol	Function	I/O
1~4	DB8~DB11	Data bus	I/O
5	GND	Ground	P
6	IOVCC	power supply	P
7	/CS	Chip select signal.	I
8	RS	register select	I
9	/WR	Write data when WRX is Low.	I
10	/RD	Read strobe signal. Read out data when RDX is Low.	I
11	GND	Ground	P
12	XL	Left electrode	-
13	YU	Top electrode	-
14	XR	Right electrode	-
15	YD	Bottom electrode	-
16	LEDA	Anode of LED backlight.	P
17~20	LEDK1~4	Cathode of LED backlight.	P
21	IM0	IM0=0 8Bit DB0-7; IM0=1 16Bit DB0-DB15	P
22	DB12	Data bus	I/O
23~30	DB0~DB7	Data bus	I/O
31	/RESET	System reset pin.	I
32~33	VCI	power supply	P
34	GND	Ground	P
35~37	DB13~DB15	Data bus	I/O

Contour Drawing



PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	DB8	21	IM0
2	DB9	22	DB12
3	DB10	23	DB0
4	DB11	24	DB1
5	GND	25	DB2
6	IOVCC	26	DB3
7	/CS	27	DB4
8	RS	28	DB5
9	/WR	29	DB6
10	/RD	30	DB7
11	GND	31	/RESET
12	XL	32	VCI
13	YU	33	VCI
14	XR	34	GND
15	YD	35	DB13
16	LED-A	36	DB14
17	LED-K1	37	DB15
18	LED-K2		
19	LED-K3		
20	LED-K4		

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