Winstar Display Co., LTD
華凌光電股份有限公司
住址: 407 台中市中清路 163 號
No.163 Chung Ching RD.,
Taichune, Taiwan, R.O.C
WEB: http://www.winstar.com.tw
E-mail: winstar@winstar.com.tw
Tel:886-4-24262208 Fax：886-4-24262207

SPECIFICATION

CUSTOMER ： _____

MODULE NO.: WF43-480272HD#002-FC

General Specification

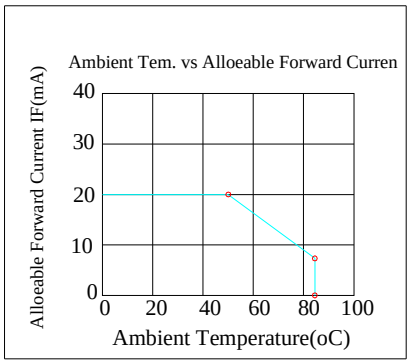
Item	Dimension	Unit
Dot Matrix	480 x RGBx272(TFT)	dots
Module dimension	105.5 x 67.2 x 4.05	mm
Active area	95.04 x 53.86	mm
Dot pitch	0.066 x 0.198	mm
LCD type	TFT, Negative, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Backlight Type	LED, Normally White	

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℃



Electrical Characteristics

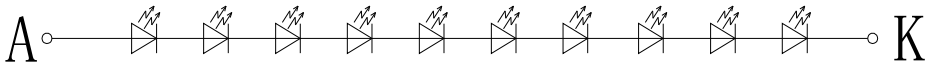
. Operating conditions:

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	VDD	—	3.0	3.3	3.6	V
Supply Voltage For Touch Logic	VDD	—	2.8	—	3.3	V

LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
LED current		-	20	-	mA	
Power Consumption		600	640	680	mW	
LED voltage	VBL+	30	32	34	V	Note 1
LED Life Time		-	50,000	-	Hr	Note 2,3,4

Note 1 : There are 1 Groups LED



Note 2 : Ta = 25 ℃

Note 3 : Brightness to be decreased to 50% of the initial value

Note 4 : The single LED lamp case

Interface

LCM PIN Definition

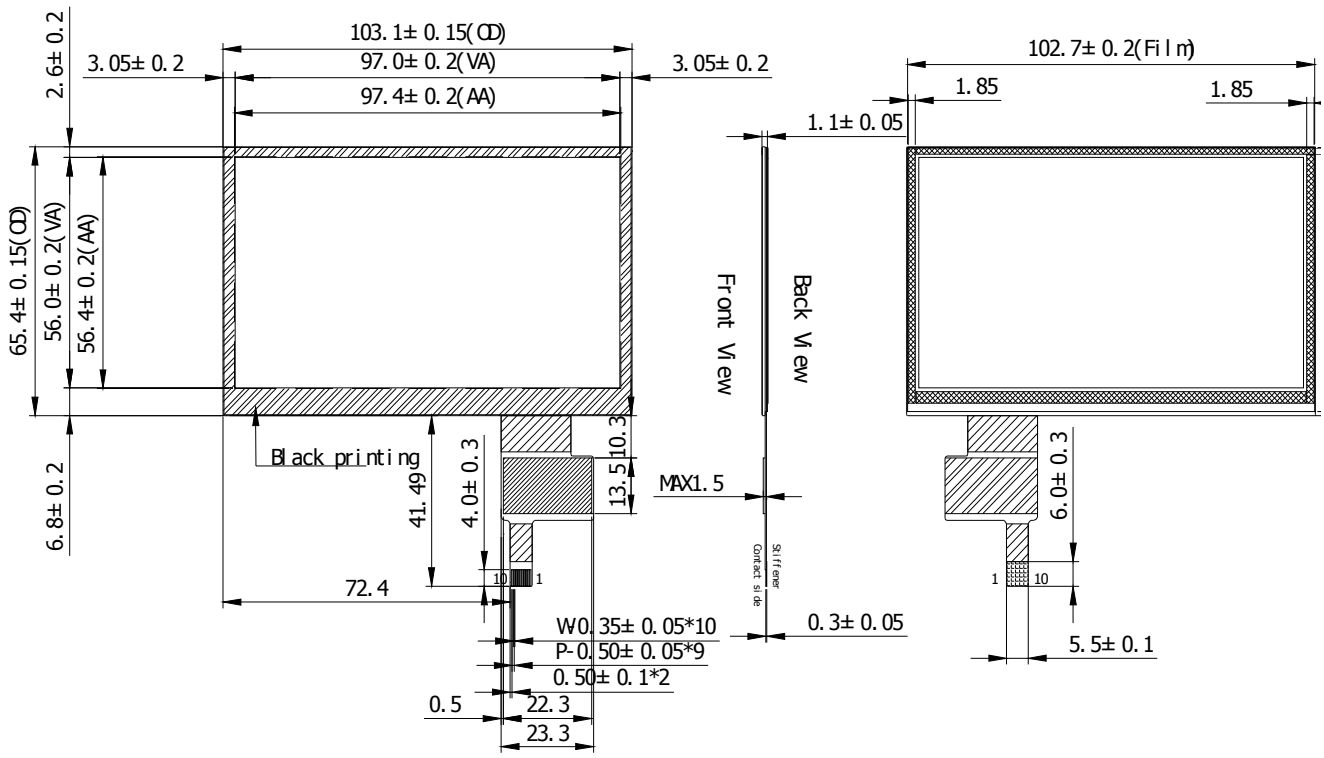
Pin	Symbol	Function	Remark
1	VLED-	Power for LED backlight cathode	
1	VLED+	Power for LED backlight anode	
3	GND	System ground pin of the IC. Connect to system ground.	
4	VDD	Power Supply : +3.3V	
5	R0	Red data	
6	R1	Red data	
7	R2	Red data	
8	R3	Red data	
9	R4	Red data	
10	R5	Red data	
11	R6	Red data	
12	R7	Red data	
13	G0	Green data	
14	G1	Green data	
15	G2	Green data	
16	G3	Green data	
17	G4	Green data	
18	G5	Green data	
19	G6	Green data	
20	G7	Green data	
21	B0	Blue data	
22	B1	Blue data	
23	B2	Blue data	
24	B3	Blue data	
25	B4	Blue data	
26	B5	Blue data	
27	B6	Blue data	
28	B7	Blue data	
29	GND	System ground pin of the IC. Connect to system ground.	
30	CLK	Pixel clock	
31	DISP	Display on/off	
32	HSYNC	Horizontal synchronous signal	
33	VSYNC	Vertical synchronous signal	

34	DE	Data Enable	
35	DC	Data/Command select	
36	GND	System ground pin of the IC. Connect to system ground.	
37	NC	No connection	
38	NC	No connection	
39	NC	No connection	
40	NC	No connection	

CTP PIN Definition

Pin	Symbol	Function	Remark
1	VSS	Ground for analog circuit	
2	VDD	Power Supply : +3.3V	
3	SCL(SSEL)	SPI Slave mode, chip select, active low / I2C clock input	
4	NC(SCK)	No connect	
5	SDA(MOSI)	SPI Slave mode, data input / I2C data input and output	
6	NC(MISO)	No connect	
7	/RST	External Reset, Low is active	
8	/WAKE	External interrupt from the host	
9	/INT	External interrupt to the host	
10	VSS	Ground for analog circuit	

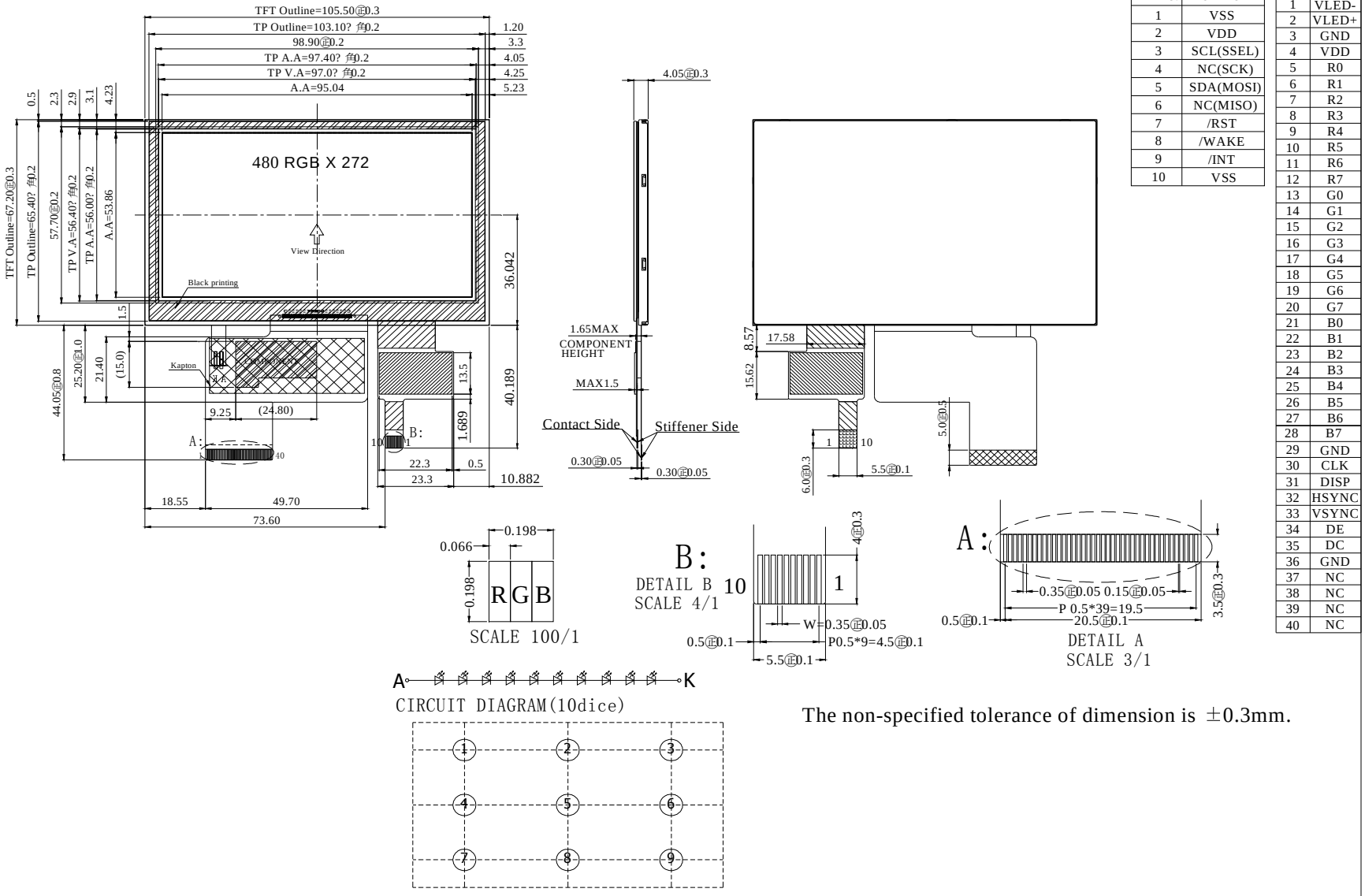
Touch panel information



The non-specified tolerance

1	Operating Temperature	-40°C ~85°C
2	Storage Temperature	-50°C ~95°C
3	Input voltage	2.8V~3.6V

Contour Drawing



PIN NO.	SYMBOL
1	VSS
2	VDD
3	SCL(SSEL)
4	NC(SCK)
5	SDA(MOSI)
6	NC(MISO)
7	/RST
8	/WAKE
9	/INT
10	VSS

PIN NO.	SYMBOL
1	VLED-
2	VLED+
3	GND
4	VDD
5	R0
6	R1
7	R2
8	R3
9	R4
10	R5
11	R6
12	R7
13	G0
14	G1
15	G2
16	G3
17	G4
18	G5
19	G6
20	G7
21	B0
22	B1
23	B2
24	B3
25	B4
26	B5
27	B6
28	B7
29	GND
30	CLK
31	DISP
32	HSYNC
33	VSYNC
34	DE
35	DC
36	GND
37	NC
38	NC
39	NC
40	NC

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