



偉同科技股份有限公司

WAYTON TECHNOLOGY CO.,LTD.



3. General specifications

3.1 General specifications

It is a color active matrix TFT (Thin Film Transistor) liquid crystal display (LCD) that uses the amorphous silicon TFT as a switching devices. This model is composed of a Transmissive type TFT-LCD Panel, a driver circuit and a back-light unit.

3.2 Features

- High image quality a-Si TFT LCD module.
- 16.7M color number.
- Support 24-bit parallel (RGB) input mode
- High contrast, high brightness
- Low power consumption.

4. Mechanical data

No	Item	Specification	Remark
1	Type	Transmissive	--
2	Display Mode	Normally Black	--
3	Pixel Element	a-Si TFT	--
4	Screen Size	5.0 inch	--
5	Resolution	800(RGB) x 480	--
6	Color Number	16.7M	
7	Active Area	108.0 (W) x 64.8(L) (mm)	--
8	Pixel Size	0.135 x 0.135 (mm)	--
9	Color Arrangement	RGB-stripe	--
10	Assembly Type	COG	--
11	Back Light	LED	--
12	Viewing Direction	Free	--
13	Weight	TBD	g
14	Touch Panel Mode	FIVE fingers detection and Touch	--
15	Module Dimension	131.2(W) x 89.0(L) x 5.3(H) (mm)	--

6. Electrical characteristics

6.1 TFT-LCD Module

Ta=25°C

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Power Supply Voltage	VDD	3.1	3.3	3.6	V	--
Operating Current	IDD	--	53	--	mA	--
Hight Level Input Voltage	VIH	0.7VDD	--	VDD	V	NOTE (1)
Low Level input Voltage	VIL	GND	--	0.3VDD	V	

NOTE(1) : CLK , DE , R0~R7 , G0~G7 , B0~B7

6.2 Back-Light Unit

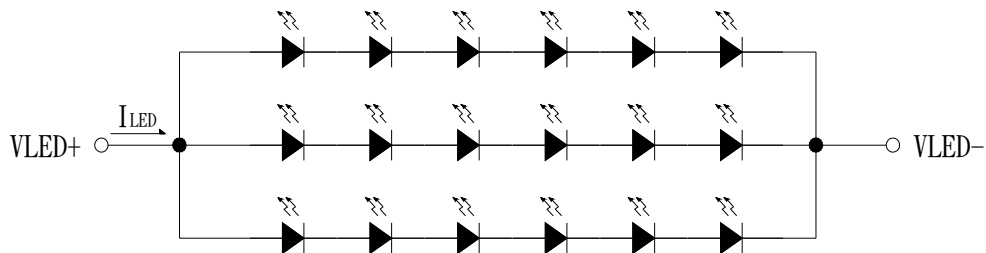
Ta=25°C

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Forward Voltage	V _{LED}	16.2	18.0	19.2	V	NOTE (1)
Forward Current	I _{LED}	--	60	--	mA	--

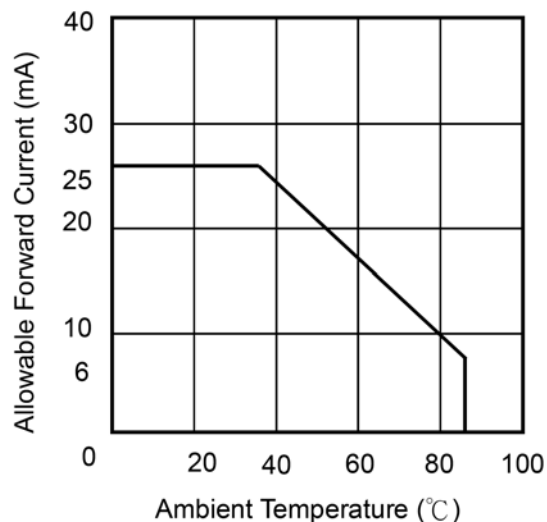
NOTE (1) : The LEDs is serial type.

NOTE (2) : The “LED life time” is defined as the module brightness decreases to 50% of original brightness that the ambient temperature is 25°C and I_{LED}=60mA .
The LED lifetime could be decreased if operating I_{LED} is lager than 60mA.

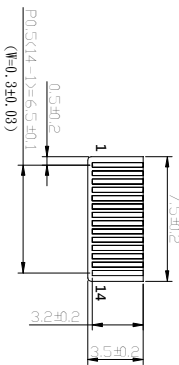
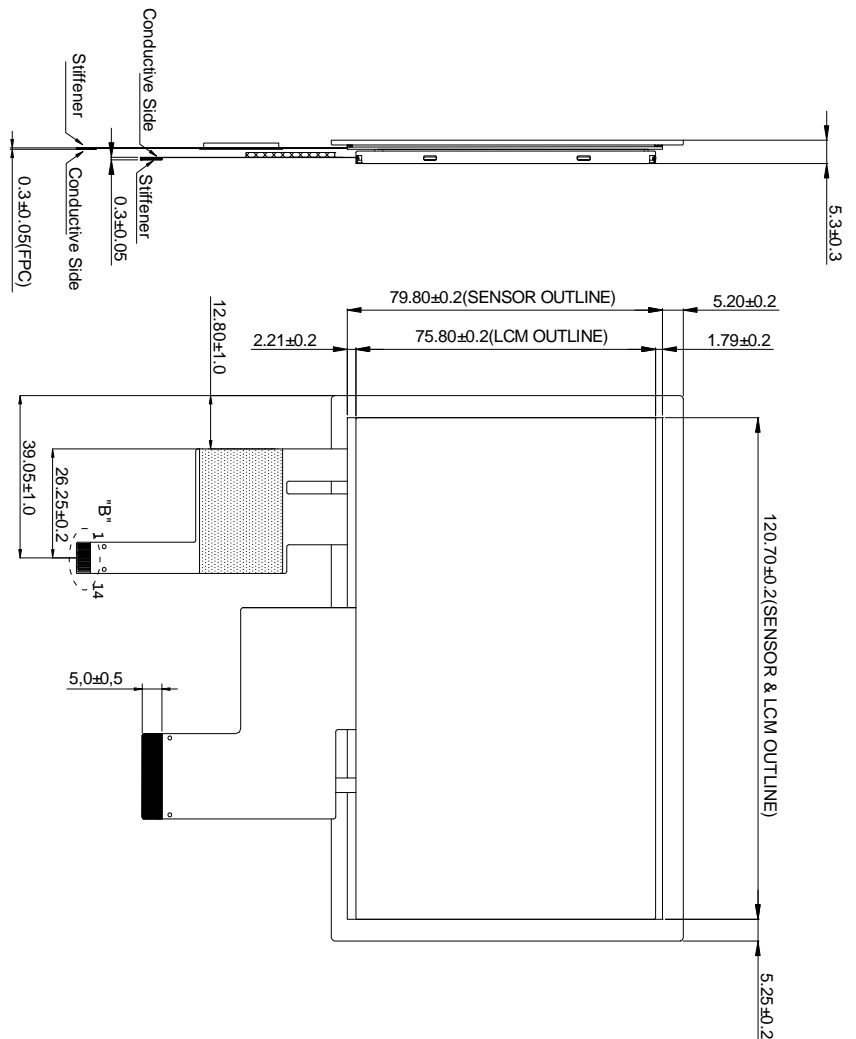
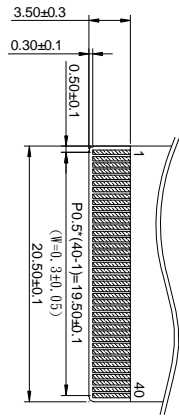
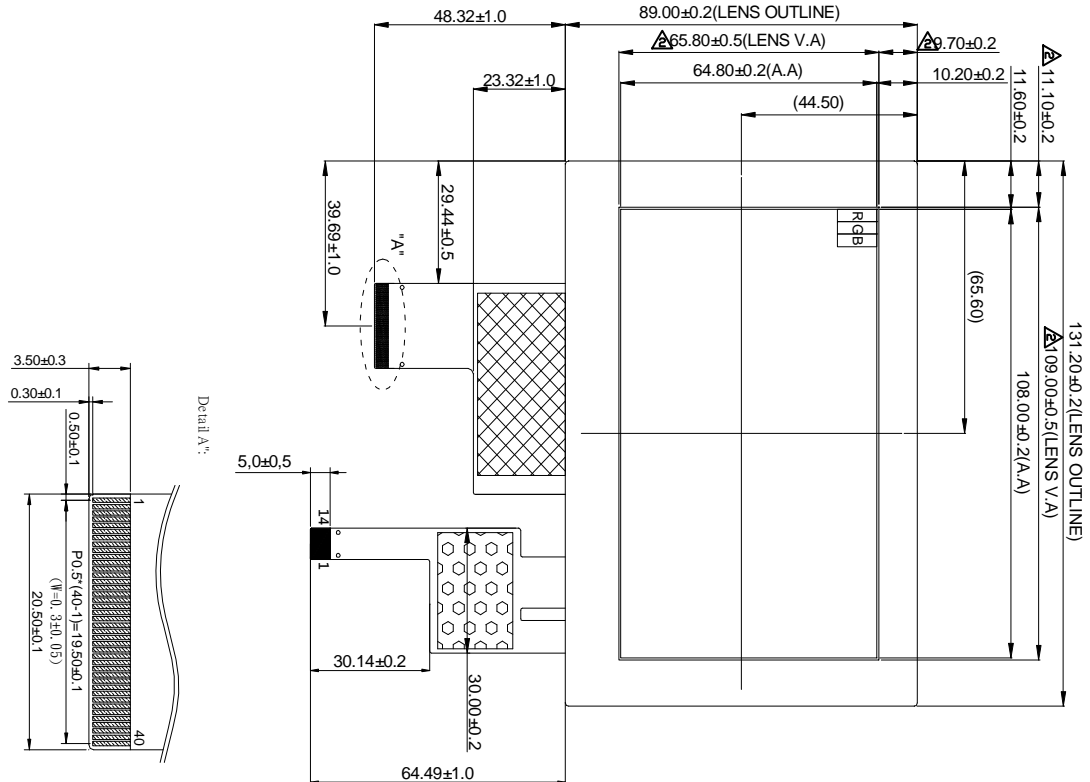
NOTE (3) : Back-light circuit :



NOTE (4) : Current reduction rate of LED backlight is according to the graph indicated below :



8. Outline dimension



10. Input Terminal Pin Assignment

10.1 Input Signal & Power

Pin no	Symbol	Description	Remark
1	VLED-	LED Cathode	-
2	VLED+	LED Anode	-
3	GND	Ground pins	-
4	VDD	Power supply for digital circuits	-
5	R0	Red data bit 0	-
6	R1	Red data bit 1	-
7	R2	Red data bit 2	-
8	R3	Red data bit 3	-
9	R4	Red data bit 4	-
10	R5	Red data bit 5	-
11	R6	Red data bit 6	-
12	R7	Red data bit 7	-
13	G0	Green data bit 0	-
14	G1	Green data bit 1	-
15	G2	Green data bit 2	-
16	G3	Green data bit 3	-
17	G4	Green data bit 4	-
18	G5	Green data bit 5	-
19	G6	Green data bit 6	-
20	G7	Green data bit 7	-
21	B0	Blue data bit 0	-
22	B1	Blue data bit 1	-
23	B2	Blue data bit 2	-
24	B3	Blue data bit 3	-
25	B4	Blue data bit 4	-
26	B5	Blue data bit 5	-
27	B6	Blue data bit 6	-
28	B7	Blue data bit 7	-
29	GND	Ground pins	-
30	DCLK	Clock signal for data latching and internal counter of	-
31	STBYB	Standby mode control. STBYB="L", enter standby mode for power saving. Timing controller and source driver will turn off, all outputs are Hi-Z.	-
32	HSD	Horizontal sync input	-
33	VSD	Vertical sync input	-
34	DE	Data Enable Control	-
35	NC	Not connection	-
36	GND	Ground pins	-

Pin no	Symbol	Description	Remark
37	NC(XR)	Not connection, Reserve for RTP	-
38	NC(YD)	Not connection, Reserve for RTP	-
39	NC(XL)	Not connection, Reserve for RTP	-
40	NC(YU)	Not connection, Reserve for RTP	-