



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. The resolution of a 2.4" Main LCD contains 240 x 320 pixels, and can display up to 262K colors and is suitable for cell phone application.

3.2 Features

- High image quality a-Si TFT LCD module.
- 262K color number.
- 8080 8-bit/16-bit data serial I/F selection.
- High-speed RAM write function is available.
- Partial-screen display function is available.
- Sleep and Stand-by modes are available for power saving.
- Low power consumption.

4. Mechanical data

No	Item	Specification	Remark
1	Type	Transmissive	--
2	Display Mode	Normally White	--
3	Pixel Element	a-Si TFT	--
4	Screen Size	2.4inch	--
5	Resolution	240(RGB) x320	--
6	Color Number	262K	--
7	Active Area	36.72(W) x 48.96(H) (mm)	--
8	Pixel Size	153 x 153 (μm)	--
9	Color Arrangement	RGB-stripe	--
10	Assembly Type	COG	--
11	Back Light	LED	--
12	Good Viewing Direction	6 o'clock	--
13	Gray Scale Inversion Direction	12 o'clock	--
14	Weight	TBD	--
15	Module Dimension	42.72 (W) x 60.26 (H) x 4.4 (D)	--

6. Electrical characteristics

(1) TFT-LCD Module

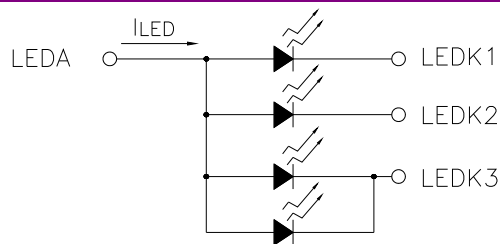
Ta=25°C

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Power supply voltage	VCC	2.4	2.75	3.3	V	--
Input voltage 'H' level	V _{IH}	0.7VCC	--	VCC	V	--
Output voltage 'L' level	V _{IL}	VSS	--	0.3VCC	V	--
Input voltage 'H' level	V _{OH}	0.8VCC	--	VCC	V	--
Output voltage 'L' level	V _{OL}	VSS	--	0.2VCC	V	--

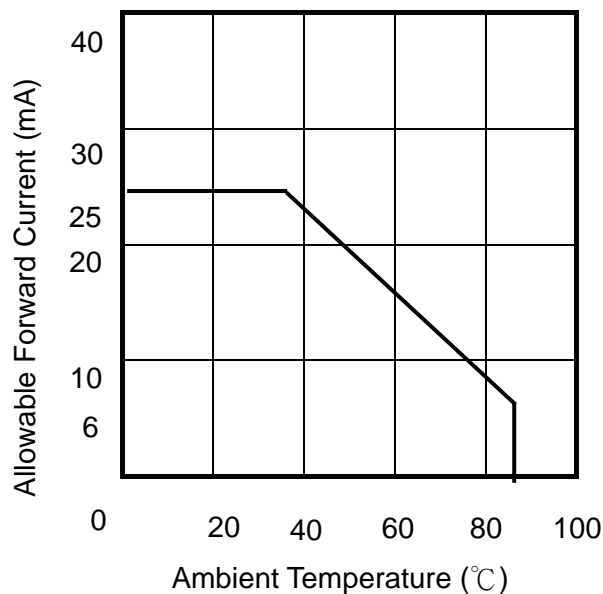
(2) Back-Light Unit

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Voltage	V _{LED}	2.9	3.2	3.5	V	NOTE (1)
Current	I _{LED}	--	60	--	mA	NOTE (1)
Power Consumption	P _{LED}	--	(192)	--	mW	--

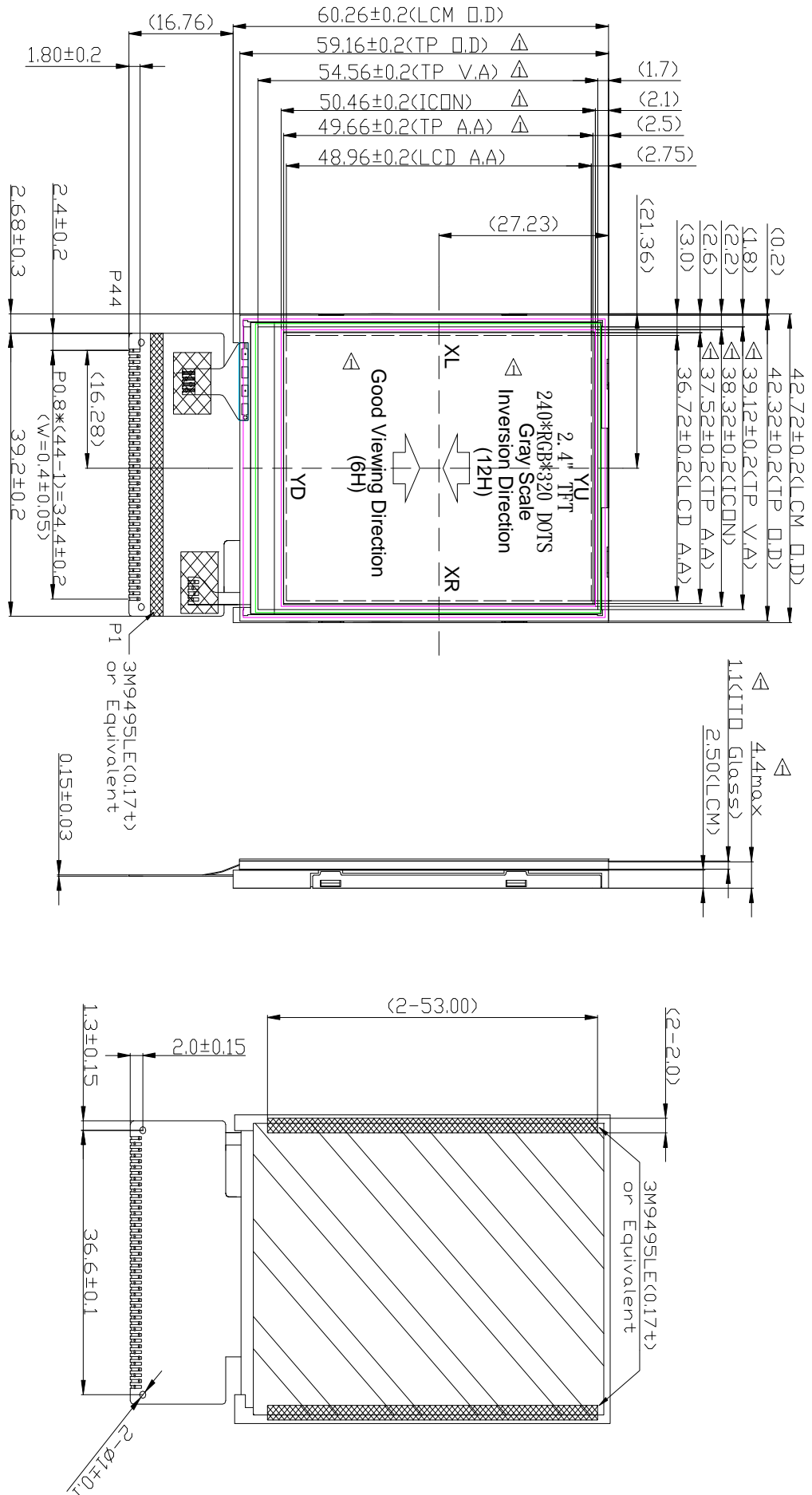
NOTE (1) : Back-light circuit



NOTE (2) : 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 Supply

Pin no	Symbol	Description												
1	GND	Power Ground												
2	YU	Touch panel TOP												
3	XL	Touch panel LEFT												
4	YD	Touch panel BOTTOM												
5	XR	Touch panel RIGHT												
6	GND	Power Ground												
7	IM0	System interface select: <table border="1" data-bbox="528 600 1197 801"> <thead> <tr> <th>IM1</th> <th>IM0</th> <th>MPU Interface Mode</th> <th>Data pin</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>80-16bit parallel I/F II</td> <td>DB[17:10], DB[8:1]</td> </tr> <tr> <td>0</td> <td>1</td> <td>80-8bit parallel I/F II</td> <td>DB[17:10]</td> </tr> </tbody> </table>	IM1	IM0	MPU Interface Mode	Data pin	0	0	80-16bit parallel I/F II	DB[17:10], DB[8:1]	0	1	80-8bit parallel I/F II	DB[17:10]
IM1	IM0	MPU Interface Mode	Data pin											
0	0	80-16bit parallel I/F II	DB[17:10], DB[8:1]											
0	1	80-8bit parallel I/F II	DB[17:10]											
8	IM1													
9	NC	Not connect												
10	NC	Not connect												
11	LCD_ID	Connect to Ground on FPC												
12	RESET	System Reset												
13	D9	Data input signal												
14	D0	Data input signal												
15	D17	Data input signal												
16	D16	Data input signal												
17	D15	Data input signal												
18	D14	Data input signal												
19	D13	Data input signal												
20	D12	Data input signal												
21	D11	Data input signal												
22	D10	Data input signal												
23	D8	Data input signal												
24	D7	Data input signal												
25	D6	Data input signal												
26	D5	Data input signal												
27	D4	Data input signal												
28	D3	Data input signal												
29	D2	Data input signal												
30	D1	Data input signal												
31	RD	Read enable in 8080 MCU parallel interface												
32	WR	Write enable in 8080 MCU parallel interface.												
33	RS	Display data/command selection pin												

Pin no	Symbol	Description
34	CS	Chip select input pin
35	GND	Power Ground
36	IOVCC	Power Supply for I/O System.
37	VCC	Power Supply for Analog, Digital System and Booster Circuit.
38	VCC	Power Supply for Analog, Digital System and Booster Circuit.
39	NC	Not connect
40	LEDK3	LED Cathode
41	LEDK2	LED Cathode
42	LEDK1	LED Cathode
43	LEDA	LED Anode
44	GND	Power Ground