Winstar Display Co., LTD
華凌光電股份有限公司
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SPECIFICATION

MODULE NO.: WF24-240320KS#000-FC

General Specifications

Item	Dimension	Unit
Size	2.4”	inch
Dot Matrix	240 x RGB x 320(TFT)	dots
Module dimension	42.72(W) x 60.26(H) x 2.25(D)	mm
Active area	36.72 x 48.96	mm
Dot pitch	0.153 x 0.153	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	6 o’clock	
Gray Scale Inversion Direction	12 o’clock	
Interface	SPI	
Aspect Ratio	Portrait	
Backlight Type	LED, Normally White	
Touch Panel	Without Touch Panel	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

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Absolute Maximum Ratings

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

Electrical Characteristics

Operating conditions

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Analog	V_{DD}	—	2.4		3.3	V
Supply Current For LCM	I_{DD}	—	—	5	7.5	mA

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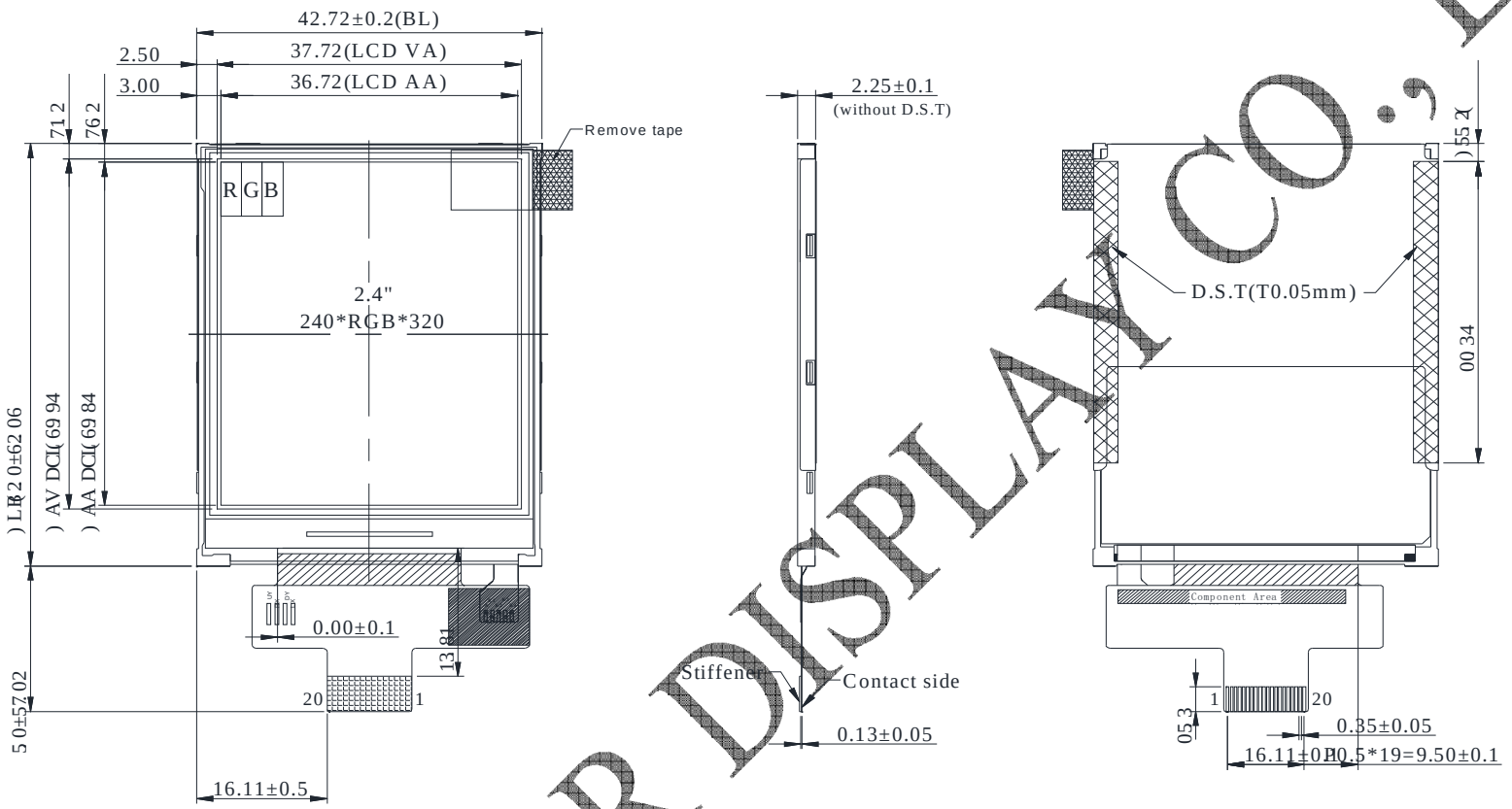
Interface

LCM PIN Definition

NO	Symbol	Function
1	GND	Ground
2	LED+	Anode of LED backlight.
3	LED-	Cathode of LED backlight.
4	GND	Ground
5	VDD	Power supply(TYP:2.8V).
6	RESET	System reset pin.
7	SDA	Serial data input pin and output pin(SDA) in serial bus system interface I. Serial data input pin (SDI) in serial bus system interface II. The data is inputted on the rising edge of the SCL signal. If not used, please let it open or connected to VSSD.
8	SCL	(NWR) Write enable pin I80 parallel bus system interface. (SCL) server as serial data clock in serial bus system interface when IFSEL=0. Fix it to IOVCC or VSSD level when not used.
9	CS	Chip select signal. Low: chip can be accessed; High: chip cannot be accessed. Must be connected to VSSD if not in use.
10	RS	Command / parameter or display data selection pin
11	GND	Ground
12	SDO	Serial data output pin (SDO) in serial bus system interface II. If not used, please open this pin.
13	TE	Tearing effect output. If not used, please open this pin
14	IM3	serial interface I / serial interface II
15	GND	Ground
16	NC	No connect
17	NC	No connect
18	NC	No connect
19	NC	No connect
20	GND	Ground

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Contour Drawing



PIN NO.	SYMBOL
1	GND
2	LED+
3	LED-
4	GND
5	VDD
6	RESET
7	SDA
8	SCL
9	CS
10	RS
11	GND
12	SDO
13	TE
14	IM3
15	GND
16	NC
17	NC
18	NC
19	NC
20	GND

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

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