Winstar Display Co., LTD
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SPECIFICATION

MODULE NO.: WF56BTIAFDNN0#

General Specifications

Item	Dimension	Unit
Size	5.6 inch(Diagonal)	inch
Dot Matrix	640 × (RGB) × 480	dots
Module dimension	126.5(W) × 100(H) × 5.7(D) mm	mm
Active area	112.896 (W) × 84.672(H) mm	mm
Dot pitch	0.0588(W) × 0.1764(H) mm	mm
LCD type	TFT, Normally White ,Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Backlight Type	LED,Normally White	
With /Without TP	Without TP	
Surface	Anti-Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

Item	Symbol	Values		Unit	Remark
		Min.	MAX.		
Power voltage	Vcc	-0.3	6.5	V	
	VLED	-0.3	6.5	V	
Operation temperature	TOP	-20	70	℃	
Storage temperature	TST	-30	80	℃	

Electrical Characteristics

Typical Operation Conditions

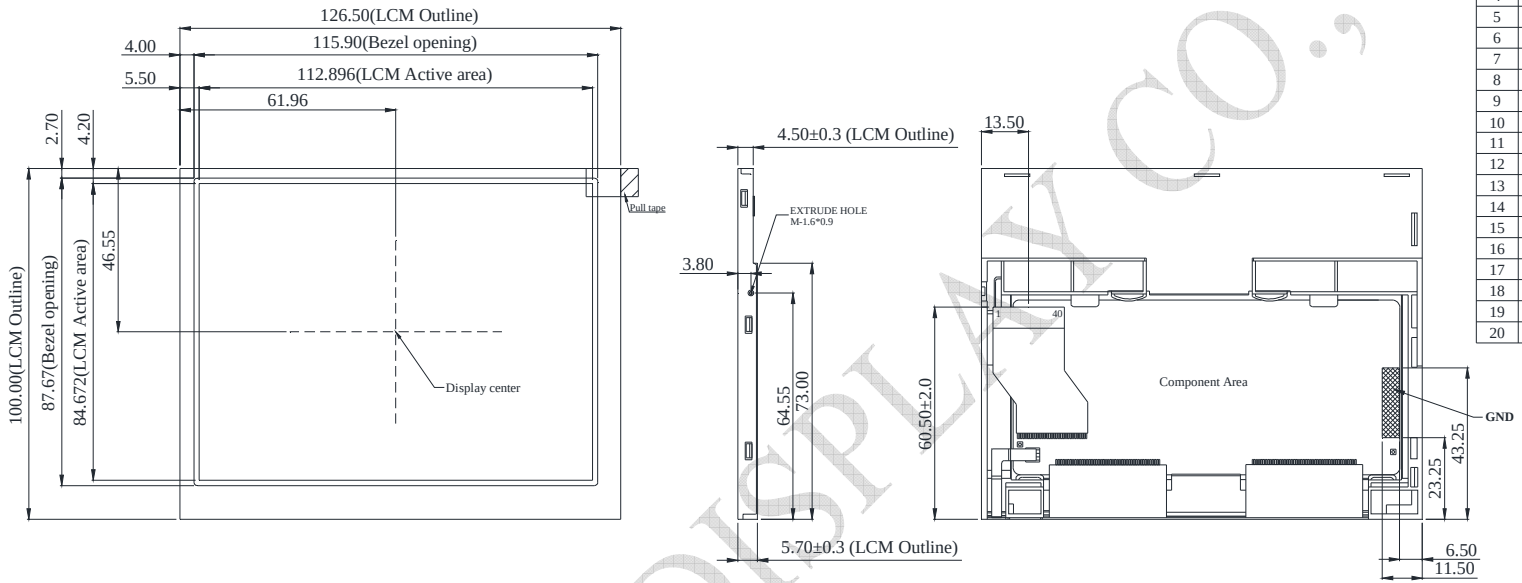
Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	VCC	3.1	3.3	3.5	V
	VLED	4.8	5.0	5.2	V
Current Consumption	ICC	-	200	250	mA
	ILED	-	380	450	mA
Input logic high voltage	VIH	0.7VCC	-	1VCC	V
Input logic low voltage	VIL	0	-	0.3VCC	V
LED life time		20000	-	-	Hr

Interface

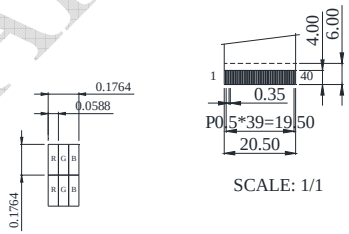
LCM PIN Definition

Pin No.	Symbol	I/O	Function
1	VLED	P	Power Voltage for LED circuit
2	VLED	P	Power Voltage for LED circuit
3	ADJ	I	Adjust the LED brightness with PWM Pulse
4	GLED	P	Ground for LED circuit
5	GLED	P	Ground for LED circuit
6	VCC	P	Power Voltage for digital circuit
7	VCC	P	Power Voltage for digital circuit
8	MODE	I	DE or HV mode control
9	DE	I	Data enable
10	VS	I	Vsync signal input
11	HS	I	Hsync signal input
12	GND	P	Power ground
13	B5	I	Blue data input (MSB)
14	B4	I	Blue data input
15	B3	I	Blue data input
16	GND	P	Power ground
17	B2	I	Blue data input
18	B1	I	Blue data input
19	B0	I	Blue data input(LSB)
20	GND	P	Power ground
21	G5	I	Green data input(MSB)
22	G4	I	Green data input
23	G3	I	Green data input
24	GND	P	Power ground
25	G2	I	Green data input
26	G1	I	Green data input
27	G0	I	Green data input(LSB)
28	GND	P	Power ground
29	R5	I	Red data input(MSB)
30	R4	I	Red data input
31	R3	I	Red data input
32	GND	P	Power ground
33	R2	I	Red data input
34	R1	I	Red data input
35	R0	I	Red data input(LSB)
36	GND	P	Power ground
37	DCLK	I	Sample clock
38	GND	P	Power ground
39	L/R	I	Select left to right scanning direction
40	U/D	I	Select up or down scanning direction

Contour Drawing



PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	V_{LED}	21	G5
2	V_{LED}	22	G4
3	ADJ	23	G3
4	G_{LED}	24	GND
5	G_{LED}	25	G2
6	V_{CC}	26	G1
7	V_{CC}	27	G0
8	MODE	28	GND
9	DE	29	R5
10	VS	30	R4
11	HS	31	R3
12	GND	32	GND
13	B5	33	R2
14	B4	34	R1
15	B3	35	R0
16	GND	36	GND
17	B2	37	DCLK
18	B1	38	GND
19	B0	39	L/R
20	GND	40	U/D



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