

WINSTAR Display

OLED SPECIFICATION

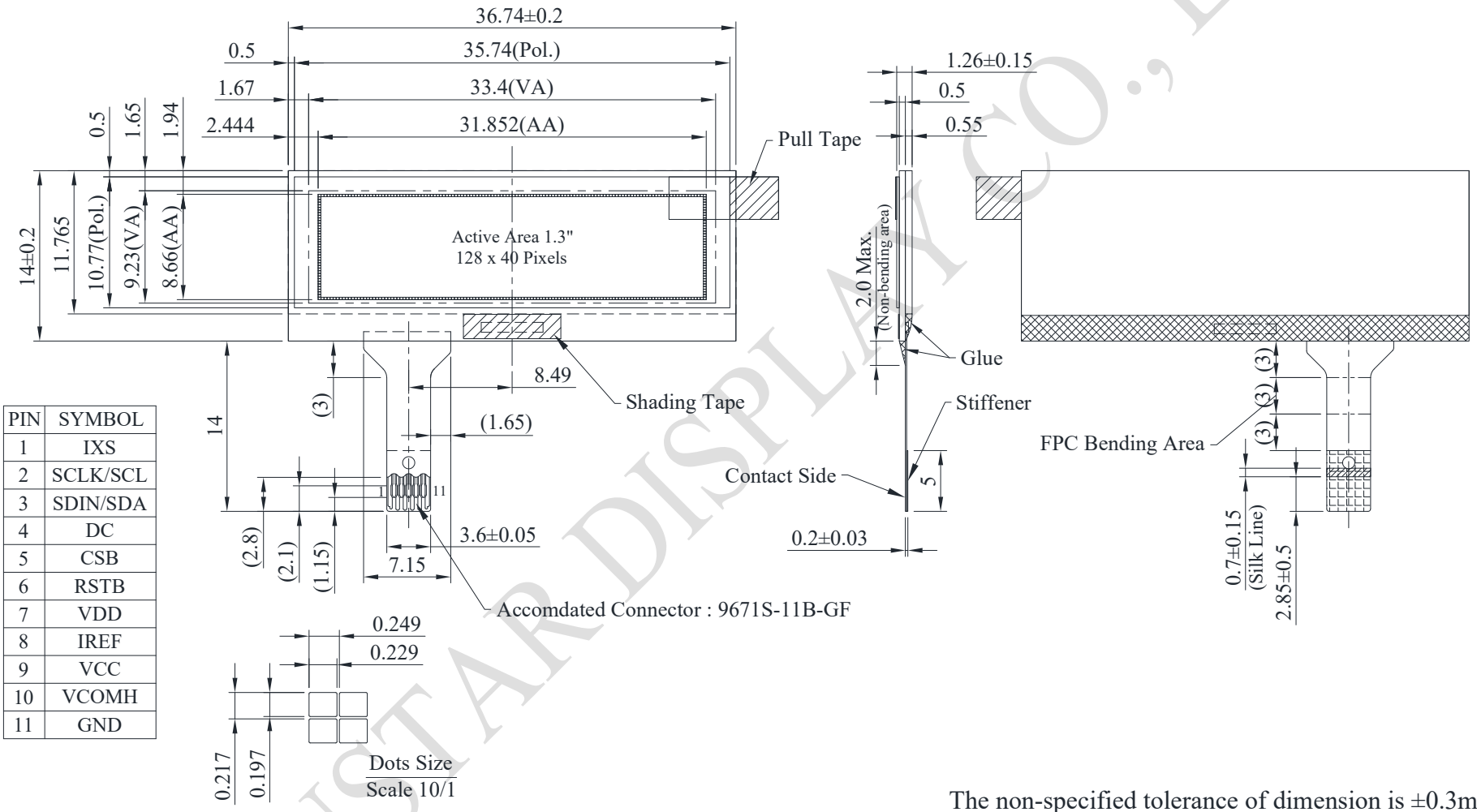
Model No:

WEO012840A

General Specification

Item	Dimension	Unit
Dot Matrix	128 x 40	—
Module dimension	36.74 × 14.00 × 1.26	mm
Active Area	31.852 × 8.66	mm
Pixel Size	0.229 × 0.197	mm
Pixel Pitch	0.249 × 0.217	mm
Display Mode	Passive Matrix	
Display Color	Monochrome	
Drive Duty	1/40 Duty	
Gray Scale	2 (White/Black)	
Dimmer Steps	256 step	
Controller IC	SH1106G-0E	
Interface	SPI/I2C	
Size	1.3 inch	

Contour Drawing & Block Diagram



The non-specified tolerance of dimension is $\pm 0.3\text{mm}$.

Interface Pin Function

I:Input, O:Output, P:Power

No.	Symbol	I/O	Function
1	IXS	I	SPI/I2C Selection.
2	SCLK/ SCL	I	Clock.
3	SDIN/ SDA	I	Data.
4	DC	I	Data/Command Selection.
5	CSB	I	Chip Selection.
6	RSTB	I	Reset.
7	VDD	P	Logic Power Supply.
8	IREF	-	Segment Current Reference.
9	VCC	P	OLED Drive Power Supply.
10	VCOMH	O	This is a pad for the voltage output high level for common signals. A capacitor should be connected between this pad and VSS.
11	GND	P	GND.

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
OLED Drive Power Supply Voltage	VCC	-0.3	14.5	V
Logic Power Supply Voltage	VDD	-0.3	3.6	V
Signal Input Voltage	V _i	-0.3	VDD+0.3	V
Operating Temperature	TOP	-40	+80	°C
Storage Temperature	TSTG	-40	+85	°C

Electrical Characteristics

1 DC Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
OLED Drive Power Supply Voltage	VCC	—	6.4	12.0	12.5	V
Logic Power Supply Voltage	VDD	—	1.65	3.3	3.5	V
Input High Volt.	V _{IH}	—	0.8xVDD	—	VDD	V
Input Low Volt.	V _{IL}	—	0	—	0.2xVDD	V
Output High Volt.	V _{OH}	—	0.8xVDD	—	VDD	V
Output Low Volt.	V _{OL}	—	0	—	0.2xVDD	V
Display 50% Pixel on	ICC	VCC=12V	—	6.5	9.0	mA