WINSTAR Display

OLED SPECIFICATION

Model No:

WEA12832x#E00-FC

WINSTAR DISPLAY Co., Ltd.

Represented by:

first FC components

FIRST Components srl Via Cavour 69, 21020 Buguggiate (VA)

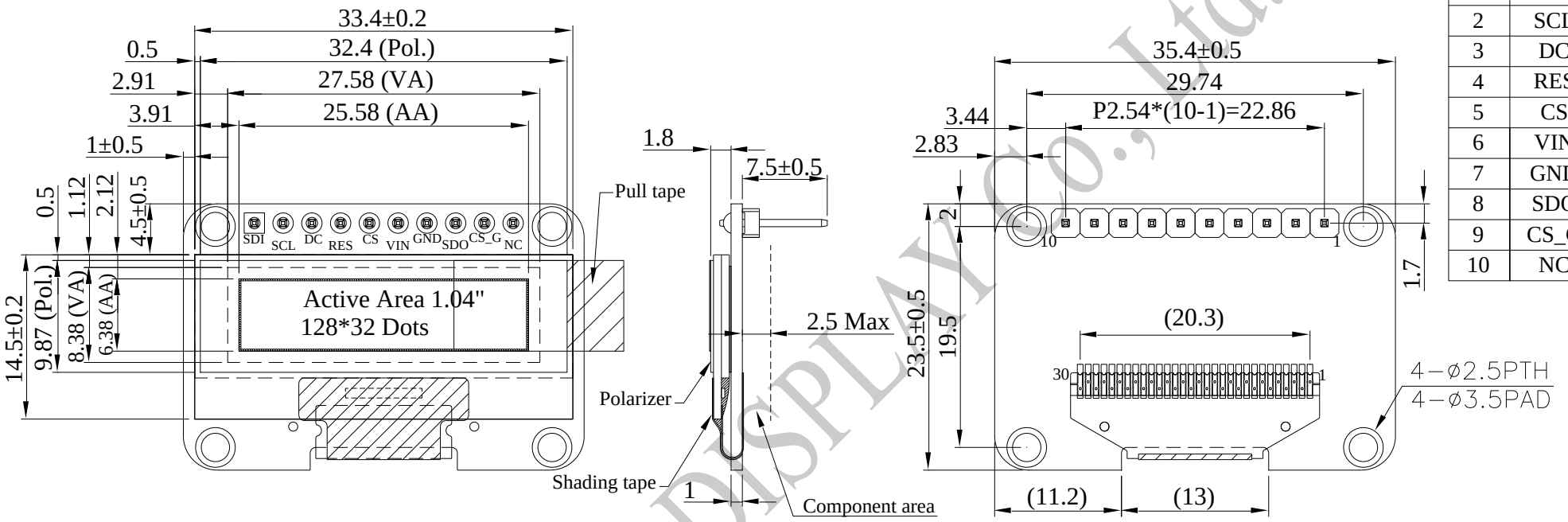
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2.General Specification

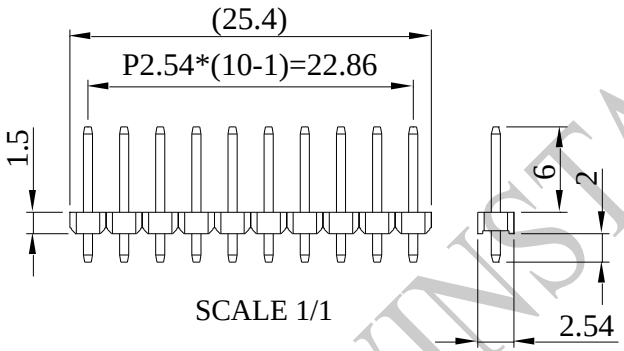
Item	Dimension	Unit
Dot Matrix	128 x 32 Dots	–
Module dimension	35.4 × 23.5 × 1.8	mm
Active Area	25.58×6.38	mm
Pixel Size	0.176 × 0.176	mm
Pixel Pitch	0.200× 0.200	mm
Display Mode	Passive Matrix	
Display Color	White	
Drive Duty	1/32Duty	
IC	SSD1306BZ	
Interface	SPI, Optional I2C	
Size	1.04 inch	

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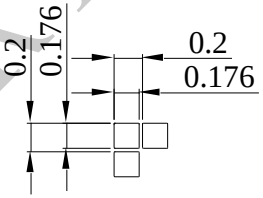
3. Contour Drawing & Block Diagram



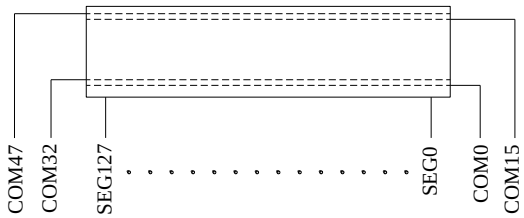
PIN	SYMBOL
1	SDI
2	SCL
3	DC
4	RES
5	CS
6	VIN
7	GND
8	SDO
9	CS_G
10	NC



SCALE 1/1



DOTS SIZE
SCALE: 10/1



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

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4. Interface Pin Function

No.	Symbol	Function
1	SDI	Supply Voltage for Logic. The I2C mode is selected, D2, D1 should be tied together and serve as SDAout, SDAin in application and D0 is the serial clock input, SCL.
2	SCL	
3	DC	Supply Voltage for Logic. In I2C mode, this pin acts as SA0 for slave address selection. When 3-wire serial interface is selected, this pin must be connected to VSS.
4	RES	Supply Voltage for Logic. This pin is reset signal input. When the pin is pulled LOW, initialization of the chip is executed. Keep this pin HIGH (i.e. connect to VDD) during normal operation.
5	CS	Supply Voltage for Logic. This pin is the chip select input. (active LOW).
6	VIN	Input voltage for 2.8 ~ 5.0V power supply.
7	GND	This is a ground pin.
8	SDO	Supply Voltage for Logic. Serial data output for 5X16 dot matrix font.
9	CS_G	Supply Voltage for Logic. Chip enable input for 5X16 dot matrix font.
10	NC	Not connection

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Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit	Notes
Supply Voltage for Logic	VDD	-0.3	4	V	1,2
Supply Voltage for input	VIN	2	7	V	1,2
Operating Temperature	TOP	-40	+80	°C	—
Storage Temperature	TSTG	-40	+85	°C	—

Note 1: All the above voltages are on the basis of “VSS = 0V”.

Note 2: When this module is used beyond the above absolute maximum ratings, permanent breakage of the module may occur. Also, for normal operations, it is desirable to use this module under the conditions according to Section 6.“Optics & Electrical Characteristics”. If this module is used beyond these conditions, malfunctioning of the module can occur and the reliability of the module may deteriorate.

Electrical Characteristics

1 DC Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage for Input	VIN	–	2.8	3.0	5.2	V
Supply Voltage for Logic	VDD	–	2.8	3.0	3.2	V
Input High Volt.	VIH	–	0.8×VDD	–	VDD	V
Input Low Volt.	VIL	–	0	–	0.2×VDD	V
Output High Volt.	VOH	–	0.9×VDD		VDD	V
Output Low Volt.	VOL	–	0	–	0.1×VDD	V
50% Check Board operating Current	ICC	Vin=3V	–	13.0	26.0	mA

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