WINSTAR Display

OLED SPECIFICATION

Model No:

WEA12832L#F00-FC

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Represented by:

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SPECIFICATION Version: A

CUSTOMER :

MODULE NO. : WEA12832L#F00-FC

APPROVED BY: **(FOR CUSTOMER USE ONLY)**	

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
RELEASE DATE:			

■APPROVAL FOR SPECIFICATIONS ONLY

□APPROVAL FOR SPECIFICATIONS AND SAMPLE

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MODEL NO：

RECORDS OF REVISION			DOC. FIRST ISSUE
VERSION	DATE	REVISED PAGE NO.	SUMMARY
0	2019/10/21		First release
A	2019/12/18		Modify Inspection specification:" Accept no dense" modify to "ignore"& Precautions

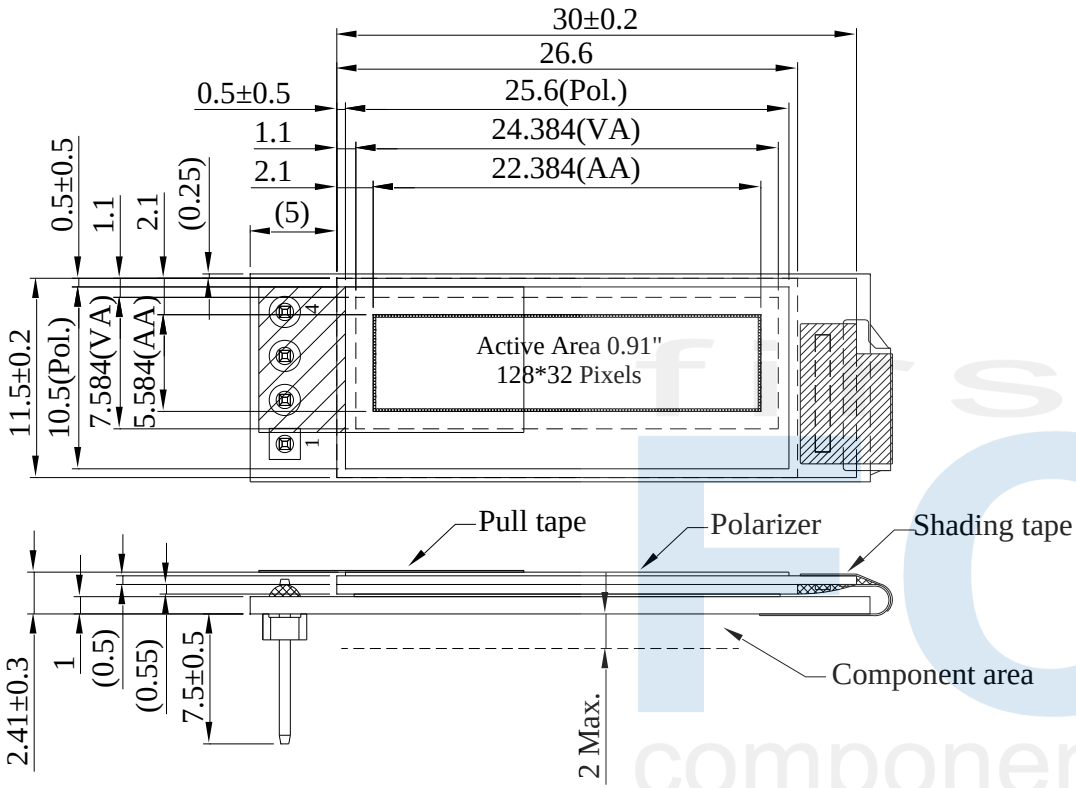
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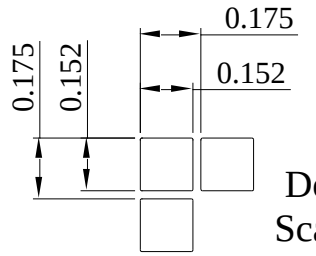
General Specification

Item	Dimension	Unit
Dot Matrix	128 x 32 Dots	–
Module dimension	35.8 x 12.0 x 2.41	mm
Active Area	22.384 x 5.584	mm
Pixel Size	0.152 x 0.152	mm
Pixel Pitch	0.175 x 0.175	mm
Display Mode	Passive Matrix	
Display Color	Yellow	
Drive Duty	1/32 Duty	
IC	SSD1306	
Interface	I2C	
Size	0.91 inch	

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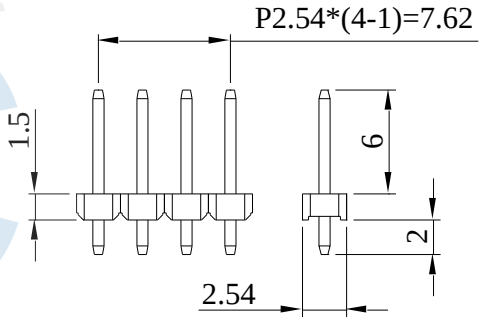
Contour Drawing & Block Diagram

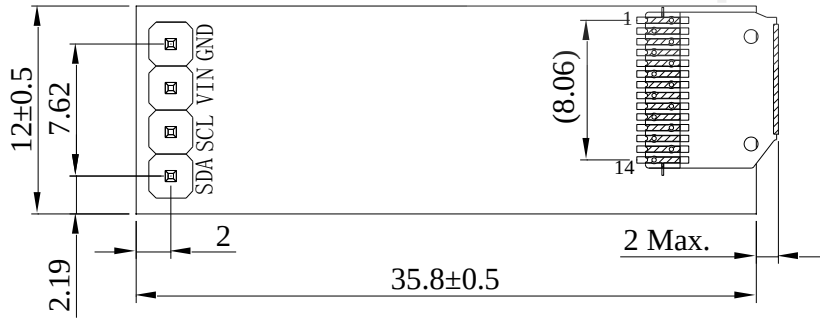


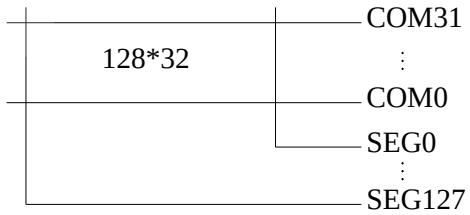


Dots Size
Scale 20/1

PIN	SYMBOL
1	GND
2	VIN
3	SCL
4	SDA







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

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Interface Pin Function

No.	Symbol	Function
1	GND	Ground
2	VIN	Power supply input.
3	SCL	When the I2C interface is selected, then D0 serves as the serial clock input pad (SCL) and D1 serves as the serial data input pad (SDAI).
4	SDA	

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Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit	Notes
Supply Voltage for Logic	VIN	0	4.0	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.

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Electrical Characteristics

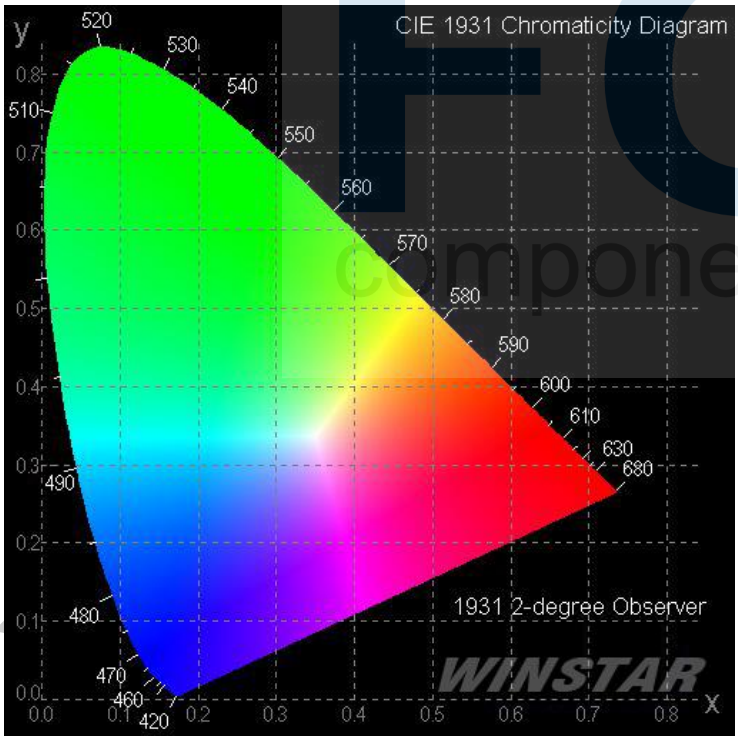
DC Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage for Logic	VIN	—	2.8	3.0	3.3	V
Input High Volt.	VIH	—	0.8×VIN	—	VIN	V
Input Low Volt.	VIL	—	0	—	0.2×VIN	V
Output High Volt.	VOH	—	0.9×VIN	—	VIN	V
Output Low Volt.	VOL	—	0	—	0.1×VIN	V
50% check Board operating Current	I_{IN}	VIN=3V	—	13.0	26.0	mA

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Optical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
View Angle	(V)θ	–	160	–	–	deg
	(H)φ	–	160	–	–	deg
Contrast Ratio	CR	Dark	2000:1	–	–	–
Response Time	T rise	–	–	10	–	μs
	T fall	–	–	10	–	μs
Display with 100% check Board Brightness			100	120	–	cd/m2
CIEx(Yellow)		(CIE1931)	0.45	0.47	0.49	–
CIEy(Yellow)		(CIE1931)	0.48	0.50	0.52	–



OLED Lifetime

ITEM	Conditions	Min	Typ	Remark
Operating Life Time	Ta=25°C / Initial 50% check board brightness 100cd/m^2	50,000 Hrs	–	Note

Notes:

1. Life time is defined the amount of time when the luminance has decayed to <50% of the initial value.
2. This analysis method uses life data obtained under accelerated conditions to extrapolate an estimated probability density function (*pdf*) for the product under normal use conditions.
3. Screen saving mode will extend OLED lifetime.

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