WINSTAR Display

OLED SPECIFICATION

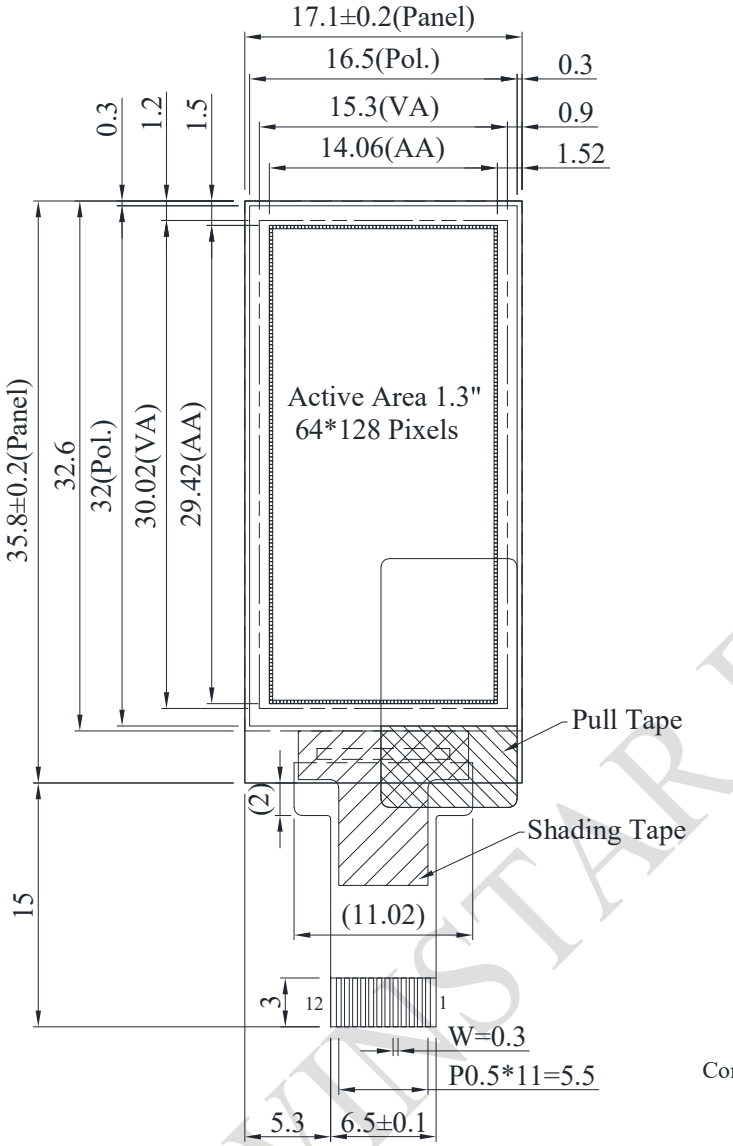
Model No:

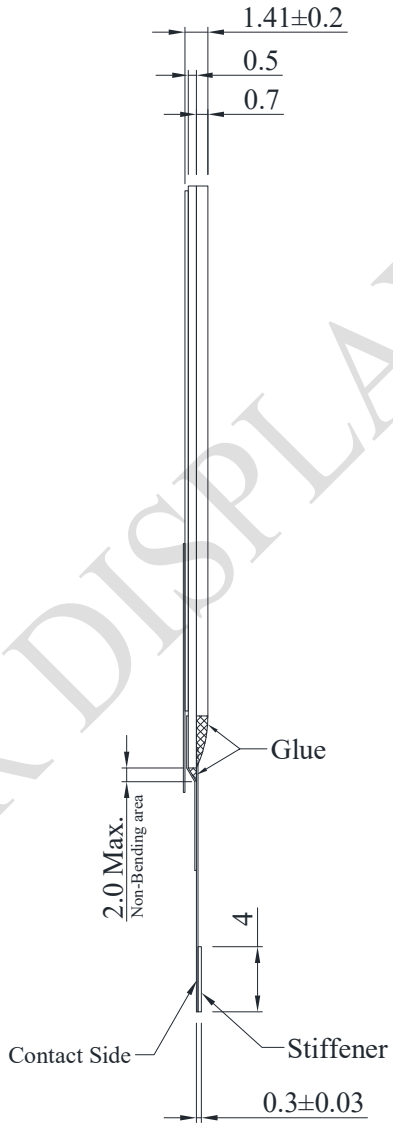
WEO064128B

General Specification

Item	Dimension	Unit
Dot Matrix	64 x 128 Dots	—
Module dimension	17.1 × 35.80 × 1.41	mm
Active Area	14.06 × 29.42	mm
Pixel Size	0.20 × 0.21	mm
Pixel Pitch	0.22 × 0.23	mm
Display Mode	Passive Matrix	
Display Color	Monochrome	
Drive Duty	1/64 Duty	
IC	SH1107	
Interface	4-Wire SPI , I2C	
Size	1.3 inch	

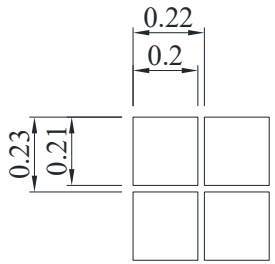
Contour Drawing & Block Diagram





Com & Seg layout

PIN NO.	SYMBOL
1	VSS
2	D1
3	D0
4	A0
5	/RES
6	/CS
7	IREF
8	IM1
9	VDD
10	VCOMH
11	VPP
12	VSS



Dot Size
Scale 20/1

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

Interface Pin Function

No.	Symbol	Function
1	VSS	Ground.
2	D1	When the serial interface is selected, then D0 serves as the serial clock input pad (SCL) and D1 serves as the serial data input pad (SI). 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 (SDA).
3	D0	
4	A0	This is the Data/Command control pad that determines whether the data bits are data or a command. A0 = “H”: Data. A0 = “L”: Command In I2C interface, this pad serves as SA0 to distinguish the different address of OLED driver.
5	$\overline{RES}$	This is a reset signal input pad. When RES is set to “L”, the settings are initialized. The reset operation is performed by the RES signal level.
6	$\overline{CS}$	This pad is the chip select input. When CS = “L”, then the chip select becomes active, and data/command I/O is enabled.
7	IREF	This is a segment current reference pad. A resistor should be connected between this pad and VSS. Set the current at 15.625uA.
8	IM1	These are the MPU interface mode select pads. IM1 connect to VDD is I2C interface. IM1 connect to VSS is 4-wire SPI interface.
9	VDD	Power supply for logic and input.
10	VCOMH	This is a pad for the voltage output high level for common signals. A capacitor should be connected between this pad and VSS.
11	VPP	This is the most positive voltage supply pad of the chip. It should be supplied externally.
12	VSS	Ground.

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage for Logic	VDD	-0.3	+3.6	V
Supply Voltage for Display	VPP	7.0	17.0	V
Operating Temperature	TOP	-40	+80	°C
Storage Temperature	TSTG	-40	+85	°C

Electrical Characteristics

DC Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage for Logic	VDD	—	1.65	3.3	3.5	V
Supply Voltage for Display	VPP	—	7.0	13.0	13.5	V
Input High Volt.	VIH	—	0.8×VDD	—	VDD	V
Input Low Volt.	VIL	—	VSS	—	0.2×VDD	V
Output High Volt.	VOH	—	0.8×VDD	—	VDD	V
Output Low Volt.	VOL	—	VSS	—	0.2×VDD	V
Display 50% Pixel on	IPP	VPP=13V	—	10	15	mA