

WINSTAR Display

OLED SPECIFICATION

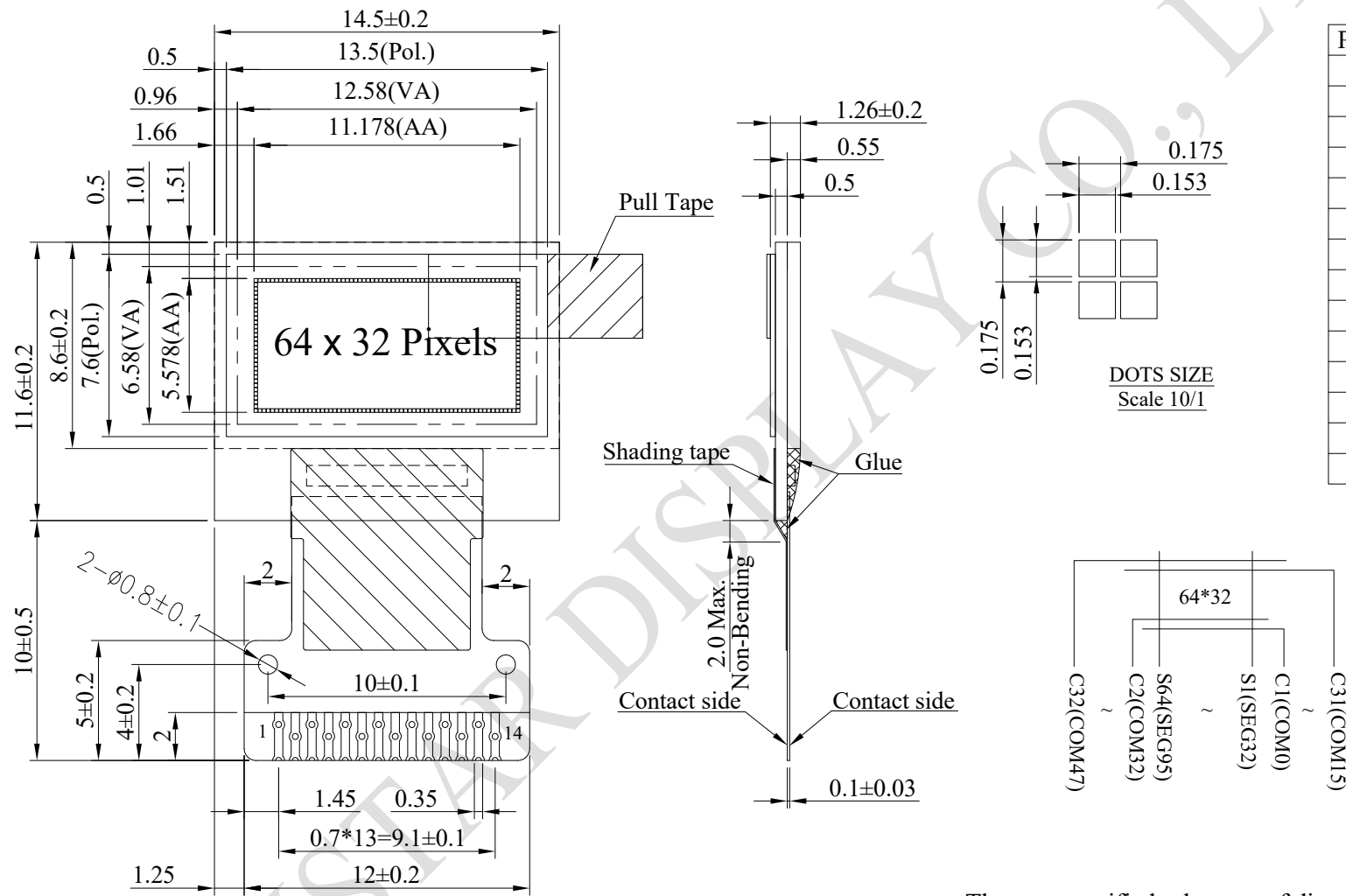
Model No:

WEO006432A

General Specification

Item	Dimension	Unit
Dot Matrix	64 x 32 Dots	—
Module dimension	14.5 × 11.6 × 1.26	mm
Active Area	11.18 × 5.58	mm
Pixel Size	0.153 × 0.153	mm
Pixel Pitch	0.175 × 0.175	mm
Display Mode	Passive Matrix	
Display Color	Monochrome	
Drive Duty	1/32Duty	
IC	SSD1306	
Interface	I2C	
Size	0.49 inch	

Contour Drawing & Block Diagram



PIN	SYMBOL
1	C2N
2	C2P
3	C1P
4	C1N
5	VBAT
6	NC
7	VSS
8	VDD
9	RES#
10	SCL
11	SDA
12	IREF
13	VCOMH
14	VCC

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

Interface Pin Function

No.	Symbol	Function
1	C2N	C2P/C2N – Pin for charge pump capacitor; Connect to each other with a capacitor.
2	C2P	
3	C1P	C1P/C1N – Pin for charge pump capacitor; Connect to each other with a capacitor
4	C1N	
5	VBAT	This is the power supply pin for the internal buffer of the DC/DC voltage converter. It must be connected to external source when the converter is used. It should be connected to VDD or kept float when the converter is not used.
6	NC	No connection.
7	VSS	This is a ground pin.
8	VDD	Power supply pin for core logic operation.
9	RES#	This pin is reset signal input. When the pin is low, initialization of the chip is executed. Keep this pin HIGH (i.e. connect to VDD) during normal operation.
10	SCL	The serial clock input
11	SDA	The serial data input/output
12	IREF	This is segment output current reference pin. When external IREF is used, a resistor should be connected between this pin and Vss to maintain the IREF current at a maximum of 30uA. When internal IREF is used, this pin should be kept NC.
13	VCOMH	The pin for COM signal deselected voltage level. A capacitor should be connected between this pin and VSS.
14	VCC	This is the most positive voltage supply pin. When charge pump is enabled, a capacitor should be connected between this pin and VSS.

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage for Logic	VDD	0	4.0	V
Supply Voltage for Display	VCC	0	15.0	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	3.0	3.3	V
Charge Pump Regulator Supply Voltage	VBAT	—	3.0	—	4.2	V
Supply Voltage for Display (Supplied Externally)	VCC	—	6.0	7.5	8.0	V
Charge Pump Output Voltage for Display (Generated by Internal DC/DC)	Charge Pump VCC	—	7.0	7.5	—	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
Display 50% Pixel on (VCC Supplied Externally)	ICC	—	—	3	6	mA
Display 50% Pixel on (VCC Generated by Internal DC/DC)	IBAT	—	—	5	20	mA