WINSTAR Display

OLED SPECIFICATION

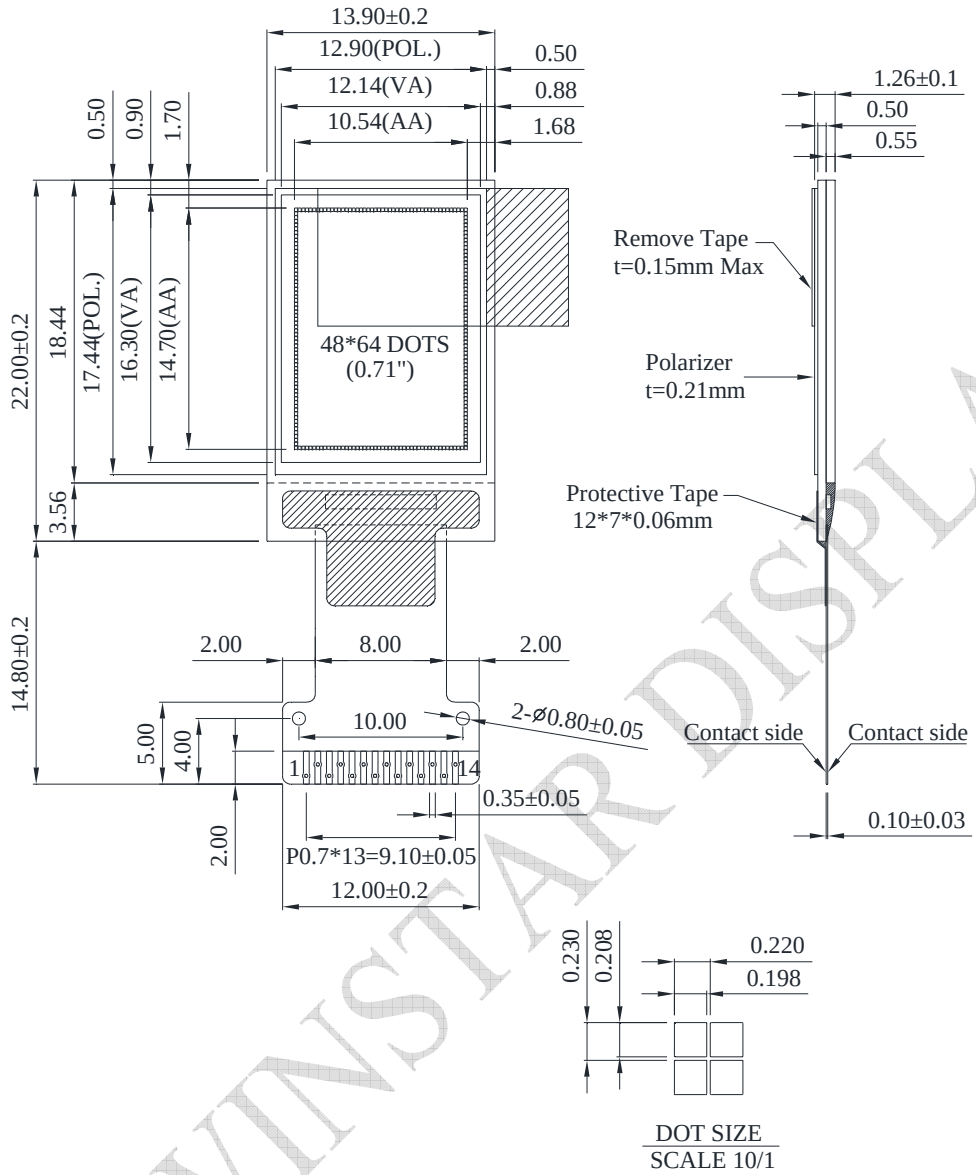
Model No:

WEO004864A

General Specification

Item	Dimension	Unit
Dot Matrix	48 x 64 Dots	—
Module dimension	13.90 x 22.00 x 1.26	mm
Active Area	10.54 x 14.70	mm
Pixel Size	0.198 x 0.208	mm
Pixel Pitch	0.220 x 0.230	mm
Display Mode	Passive Matrix	
Display Color	Monochrome	
Drive Duty	1/64 Duty	
IC	SSD1306	
Interface	I2C	
Size	0.71 inch	

Contour Drawing & Block Diagram



PIN NO.	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 ±0.3mm.

Interface Pin Function

No.	Symbol	Function
1	C2N	*Positive Terminal of the Flying Inverting Capacitor Negative Terminal of the Flying Boost Capacitor* The charge-pump capacitors are required between the terminals. They must be floated when the converter is not used.
2	C2P	
3	C1P	
4	C1N	
5	VBAT	*Power Supply for DC/DC Converter Circuit* 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 when the converter is not used.
6	NC	No connection.
7	VSS	*Ground of Logic Circuit* This is a ground pin. It acts as a reference for the logic pins. It must be connected to external ground.
8	VDD	*Power Supply for Logic* This is a voltage supply pin. It must be connected to external source.
9	RES#	*Power Reset for Controller and Driver* *This pin is reset signal input. When the pin is low, initialization of the chip is executed.*
10	SCL	*Host Data Input/Output Bus* When serial mode is selected, D1 will be the serial data input SDIN and D0 will be the serial clock input SCLK. When I2C mode is selected, D2 & D1 should be tired together and serve as SDAout & SDAin in application and D0 is the serial clock input SCL.
11	SDA	
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	*Voltage Output High Level for COM Signal* This pin is the input pin for the voltage output high level for COM signals. A capacitor should be connected between this pin and VSS.
14	VCC	*Power Supply for OEL Panel* This is the most positive voltage supply pin of the chip. A stabilization capacitor should be connected between this pin and VSS when the converter is used. It must be connected to external source when the converter is not used.

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	—	2.8	3.0	3.3	V
Supply Voltage for Display	VCC	—	7.0	7.5	8.0	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	VCC=7.5V	—	15.0	25.0	mA