

WINSTAR Display

OLED SPECIFICATION

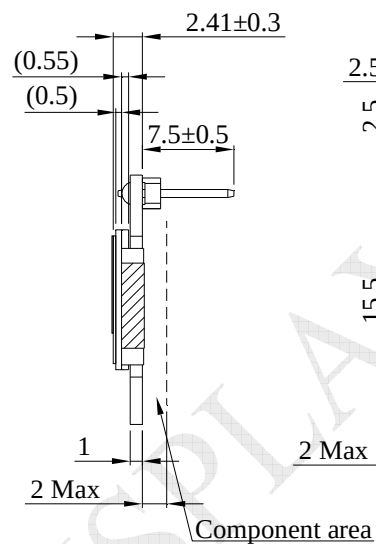
Model No:

WEA012832D

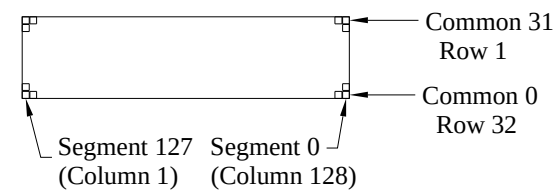
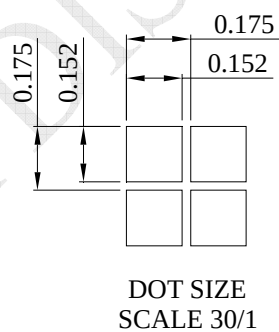
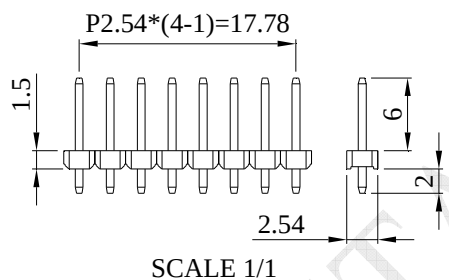
General Specification

Item	Dimension	Unit
Dot Matrix	128 x 32 Dots	—
Module dimension	32.5 × 20.5 × 2.41	mm
Active Area	22.384 × 5.584	mm
Pixel Size	0.152 × 0.152	mm
Pixel Pitch	0.175 × 0.175	mm
Display Mode	Passive Matrix	
Display Color	Monochrome	
Drive Duty	1/32 Duty	
IC	SSD1306BZ	
Interface	SPI	
Size	0.91 inch	

Figure 1: Mechanical drawing of the camera module. The drawing shows a top-down view of the module with various dimensions and labels. Key dimensions include a total width of 30 ± 0.2 mm, a total height of 11.5 ± 0.2 mm, and a central active area of 0.91 inches (128x32 pixels). Pin headers are labeled with functions: SDA, SCL, DC, RST, CS, VDD, VIN, and GND. A pull tape is indicated at the bottom.



PIN	SYMBOL
1	SDA
2	SCL
3	DC
4	RST
5	CS
6	VDD
7	VIN
8	GND



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Interface Pin Function

No.	Symbol	Function
1	SDA	When serial mode is selected, D1 will be the serial data input SDIN and D0 will be the serial clock input SCLK.
2	SCL	
3	DC	<i>Data/Command Control</i> This pin is Data/Command control pin.. When the pin is pulled high and serial interface mode is selected, the data at SDIN is treated as data. When it is pulled low, the data at SDIN will be transferred to the command register.
4	RST	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	This pin is the chip select input. (active LOW).
6	VDD	2.8 ~ 3.3V Power supply pin for core logic operation.
7	VIN	4.8 ~ 5.2V Power supply pin for core logic operation.
8	GND	This is a ground pin.

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage for Logic	VDD	1.65	3.3	V
Supply Voltage for Logic	VIN	4.0	6.0	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 (3V)	VDD	—	2.8	3.0	3.3	V
Supply Voltage for Logic (5V)	VIN	—	4.8	5.0	5.2	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	VDD=3V	—	13.0	26.0	mA