RAYSTAR Optronics, Inc.
曜凌光電股份有限公司

SPECIFICATION

Model No:
REX064128A

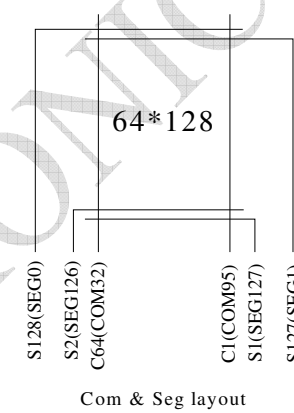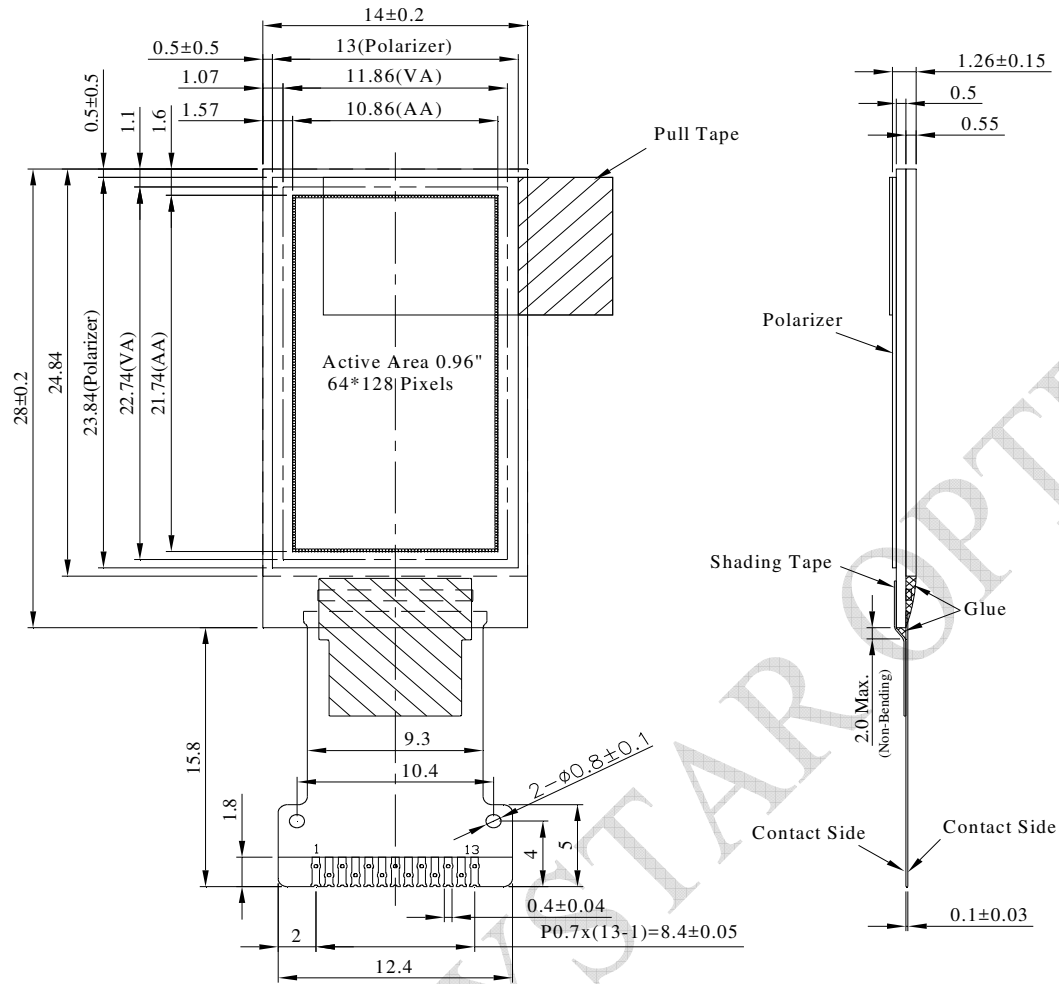# General Specification

The Features is described as follow:

■   Module dimension: 14.0 × 28.0 × 1.26 mm

■   Active area: 10.86 × 21.74 mm

■   Dot Matrix: 64 × 128

■   Pixel size: 0.15 × 0.15 mm

■   Pixel pitch: 0.17 ×0.17 mm

■   Display Mode：Passive Matrix

■   Duty: 1/64 Duty

■   Display Color: Monochrome

■   IC: SH1107
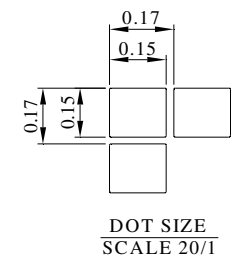
■   Interface: 4-wire SPI , I2C

■   SIZE:0.96 inch

Interface Pin Function

No.	Symbol	Function
1	NC	Not connected.
2	VPP	This is the most positive voltage supply pad of the chip. It should be supplied externally.
3	VCOMH	This is a pad for the voltage output high level for common signals. A capacitor should be connected between this pad and VSS.
4	VDD	Power supply for logic and input.
5	IM1	These are the MPU interface mode select pads. IM1 connect to VDD is I2C interface. IM1 connect to GND is 4-wire SPI interface.
6	IREF	This is a segment current reference pad. A resistor should be connected between this pad and VSS. Set the current at 15.625mA.
7	CS	This pad is the chip select input. When CS = "L", then the chip select becomes active, and data/command I/O is enabled.
8	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.
9	DC	This is the Data/Command control pad that determines whether the data bits are data or a command. DC = "H": the inputs at D0 to D1 are treated as display data. DC = "L": the inputs at D0 to D1 are transferred to the command registers. In I2C interface, this pad serves as SA0 to distinguish the different address of OLED driver.
10	D0	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).
11	D1	
12	VSS	Ground.
13	NC	Not connected.

Contour Drawing & Block Diagram

Dimensions and labels:
- 14±0.2
- 13(Polarizer)
- 11.86(VA)
- 10.86(AA)
- 0.5±0.5
- 1.07
- 1.57
- 0.5±0.5
- 1.1
- 1.6
- Pull Tape
- 28±0.2
- 24.84
- 23.84(Polarizer)
- 22.74(VA)
- 21.74(AA)
- Active Area 0.96" 64*128 Pixels
- 15.8
- 1.8
- 9.3
- 10.4
- 2 – Φ0.8±0.1
- 5
- 4
- 1
- 13
- 0.4±0.04
- P0.7x(13-1)=8.4±0.05
- 2
- 12.4

Side view:
- 1.26±0.15
- 0.5
- 0.55
- Polarizer
- Shading Tape
- Glue
- 2.0 Max. (Non-Bending)
- Contact Side
- Contact Side
- 0.1±0.03

Com & Seg layout:
- 64*128
- S128(SEG0)
- S2(SEG126)
- C64(COM32)
- C1(COM95)
- S1(SEG127)
- S127(SEG1)
- Com & Seg layout

PIN	SYMBOL
1	NC(GND)
2	VPP
3	VCOMH
4	VDD
5	IM1
6	IREF
7	CS
8	RES
9	DC
10	D0
11	D1
12	VSS
13	NC(GND)

DOT SIZE SCALE 20/1
- 0.17
- 0.15
- 0.17
- 0.15

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

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage for Logic	VDD	-0.3	3.6	V
Supply Voltage for Display	VPP	-0.3	17.0	V
Operating Temperature	TOP	-30	+70	°C
Storage Temperature	TSTG	-30	+70	°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
Supply Voltage for Display	VPP	—	7.0	9.0	9.5	V
Input High Volt.	VIH	—	0.8×VDD	—	VDD	V
Input Low Volt.	VIL	—	0	—	0.2×VDD	V
Output High Volt.	VOH	—	0.8×VDD	—	VDD	V
Output Low Volt.	VOL	—	0	—	0.2×VDD	V
Operating Current for VCC (50% display ON)	IPP	VPP=9V	—	8	12	mA