

0.85 inch TFT LCD



PROFILE

- Type: IPS TFT/Normal Black
- Display format: 128(RGB)×128
- Controller IC: ST7735
- Interface: SPI4
- Input Voltage: 2.4~3.3V

FEATURES

NO.	ITEM	SPECIFICATION	UNIT
1	Panel Size	0.85	inch
2	Outline Dimension	17.85(W) x 20.82(H) x 1.46(T) (Excluding FPC)	mm
3	Active Area	15.2064(H) x 15.2064(V)	mm
4	Number of Pixels	128(H) × 3(RGB) × 128(V)	pixels
5	Pixel Pitch	39.6 (H) x 118.8(V)	μm
6	Pixel arrangement	RGB vertical stripe	-
7	Display Mode	Normal Black	-
8	Viewing Direction	ALL	-
9	Luminance(cd/m ²)	260(TYP.)	cd/m ²
10	Contrast Ratio	1200(TYP.)	-
11	Interface	SPI4	-
12	Backlight	White LED	-
13	Drive IC	ST7735	-
14	Operation Temperature	-20~70	°C
15	Storage Temperature	-30~80	°C

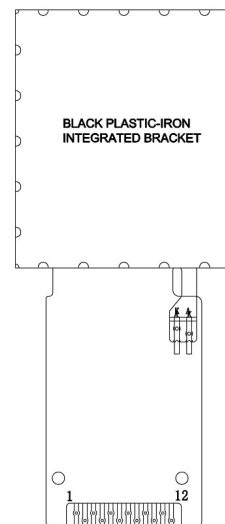
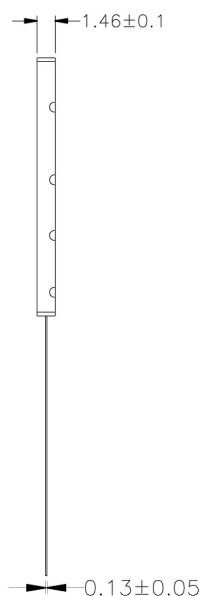
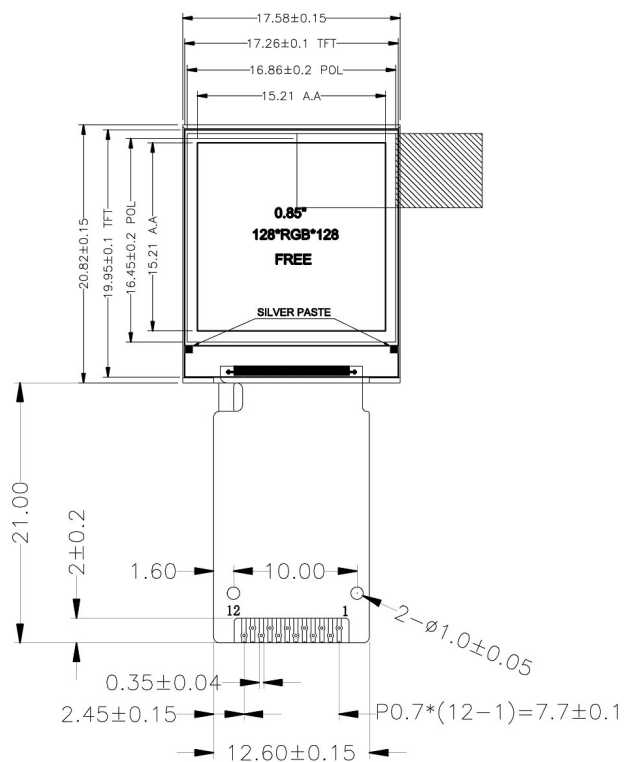
MECHANICAL DATA			ABSOLUTE MAXIMUM RATINGS					
ITEM	STANDARD VALUE	UNIT	ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Module Dimension	17.85 x 20.82	mm	Supply Voltage(I/O)	VDD	-0.3	-	4.6	V
Active Area	15.2064 x 15.2064		Analog Supply Voltage	VDDIO	-0.3	-	4.6	
Height	1.46		Logic Input Voltage	VIN	-0.3	-	VDD+0.3	

ELECTRICAL CHARACTERISTICS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN	TYP	MAX	
System Voltage	VDD	Ta =25℃	2.4	2.8	3.3	V
Interface Operation Voltage	VDDIO		1.65	1.8	3.3	
Gate Driver High Voltage	VGH		12.2	-	14.97	
Gate Driver Low Voltage	VGL		-12.5	-	-7.16	
Operating Current for VDD	IDD		-	8	10	mA
Voltage for LED backlight	VLED		2.9	3.0	3.1	V
Current for LED backlight	ILED	1 LED	20	-	25	mA
Brightness of LCM	Lbr		230	260	-	cd/m ²

For detailed information, please refer to the “Product Numbering System” document.

PIN DESCRIPTION		
NO.	SYMBOL	FUNCTION
1	GND	Power Ground
2	LEDK	LED Cathode
3	LEDA	LED Anode
4	VDD	Power Supply for Analog
5	GND	Power Ground
6	GND	Power Ground
7	D/C	Display data/command selection pin in 4-line serial interface.
8	CS	CS Chip selection pin;Low enable,high disable.
9	SCL	This pin is used to be serial interface clock
10	SDA	SPI interface input/output pin.the data is latched on the rising edge of the SCL signal.
11	RESET	This signal will reset the device and it must be applied to properly initialize the chip. Signal is active low.
12	GND	Power Ground

DIMENSIONS in millimeters



LED BACKLIGHT CIRCUIT DIAGRAM

LED A ○ ———— LED K

BACKLIGHT DRIVING CONDITION:
VF=3.0V IF=20mA

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