

FPV Thermal imaging camera

BOS-MINI640-9



JS-MINI640-9 The thermal imaging movement is a miniaturized integrated product characterized by small size and low power consumption, which can be integrated into various types of equipment, such as robot gimbals, individual helmets, pods, etc.

【Functional characteristics】

- High sensitivity vanadium oxide non cooled detector, supporting 640×512 resolution
- Support analog signal output
- Support automatic, manual calibration, and background correction
- Compact design for easy integration

【Application scenarios】

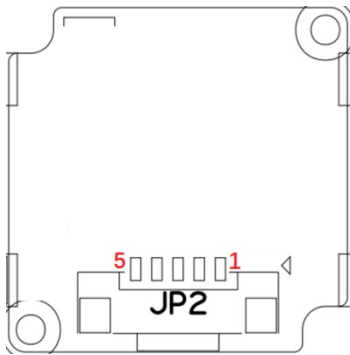
- Integration of drone pods, intelligent equipment, etc

• Technical indicators

热成像	
Sensor type	Vanadium oxide (VOx) microcalorimeter
Resolution	640 × 512
Pixel Pitch	12μm
Response band	8~14 μm
NETD	≤50 mK(@25 °C,F#1.0)
Lens Parameters	9.1mm
FOV (H*V)	48.3°(H) ×38.6°(V), 62.4°(D)
Minimum focusing distance	2m
Max Aperture Value	F1.0
Mage display	
Output resolution	720 × 576
Electronic amplification	×1, ×2, ×4, ×8
Electronic amplification	support
Bad point correction	support
image	Off, Vertical, Horizontal, Center
Image detail enhancement	support
AGC mode	histogram
Brightness adjustment	support
Pseudo color mode	Supports 15 modes including White Heat, Black Heat, Fusion 1, Rainbow, Fusion 2, Iron Red 1, Iron Red 2, etc
Contrast adjustment	support
system function	
interface	CVBS
system parameter	
Storage temperature	-45 °C ~ + 75 °C
Storage humidity	<90% RH
Vibration shock	Vibration: sinusoidal vibration, 10m/s ² , 3-axis Shock: Half sine wave, 15g/11ms, 3-axis 6-way
working temperature	-40 °C~80 °C
weight	≤23 g
size	37.82mm×20mm×20mm
power	≤0.8 W
Power input	DC 5 V-17 V

Interface Definition

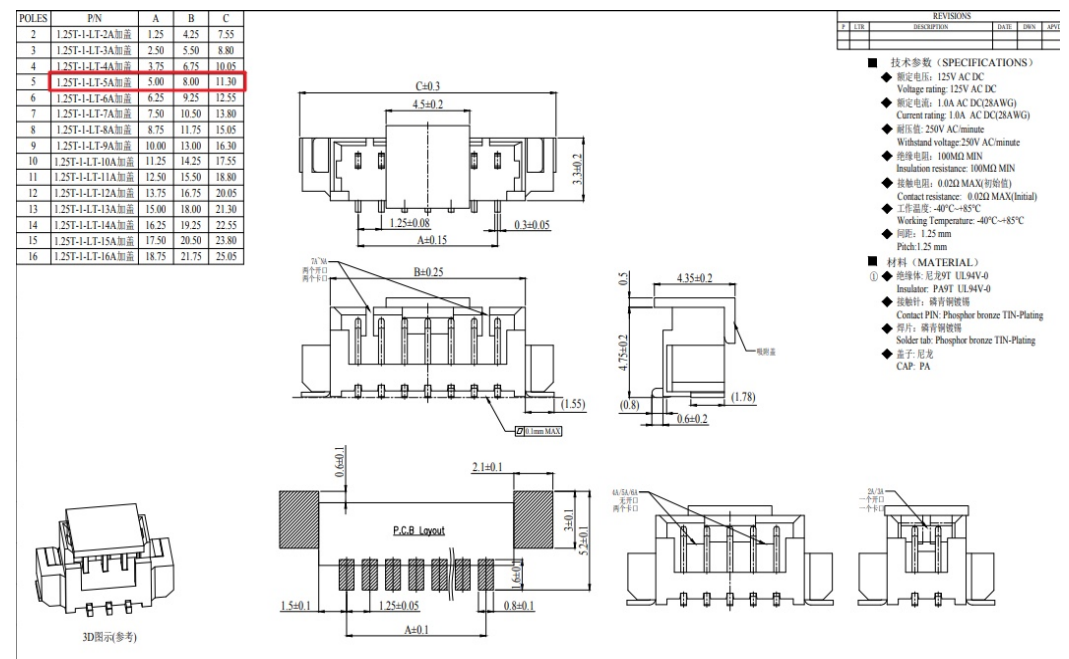
Interface board diagram:



Pin Definition:

1	POWER	DC 5~16VPower supply
2	GND	GND
3	CVBS	CVBS
4	UART_TXD	Module UART sending 3.3V
5	UART_RXD	Module UART reception 3.3V

接插件参数:



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技术参数 (SPECIFICATIONS)

- 额定电压: 125V AC/DC
- Voltage rating: 125V AC/DC
- 额定电流: 1.0A AC DC(28AWG)
- Current rating: 1.0A AC DC(28AWG)
- 耐压值: 250V AC/minute
- Withstand voltage: 250V AC/minute
- 绝缘电阻: 100MΩ MIN
- Insulation resistance: 100MΩ MIN
- 接触电阻: 0.02Ω MAX(初始值)
- Contact resistance: 0.02Ω MAX(Initial)
- 工作温度: -40°C~+85°C
- Working Temperature: -40°C~+85°C
- 间距: 1.25 mm
- Pitch: 1.25 mm

材料 (MATERIAL)

① 绝缘体: 尼龙9T UL94V-0

Insulator: PA9T UL94V-0

- 接触材料: 磷青铜镀锡
- Contact P/N: Phosphor bronze TIN-Plating
- 焊片: 磷青铜镀锡
- Solder tab: Phosphor bronze TIN-Plating
- 端子: 尼龙
- CAP: PA

structure size

≤39mm×20mm×20mm

