

FSK500C18 新能源电动汽车传感器

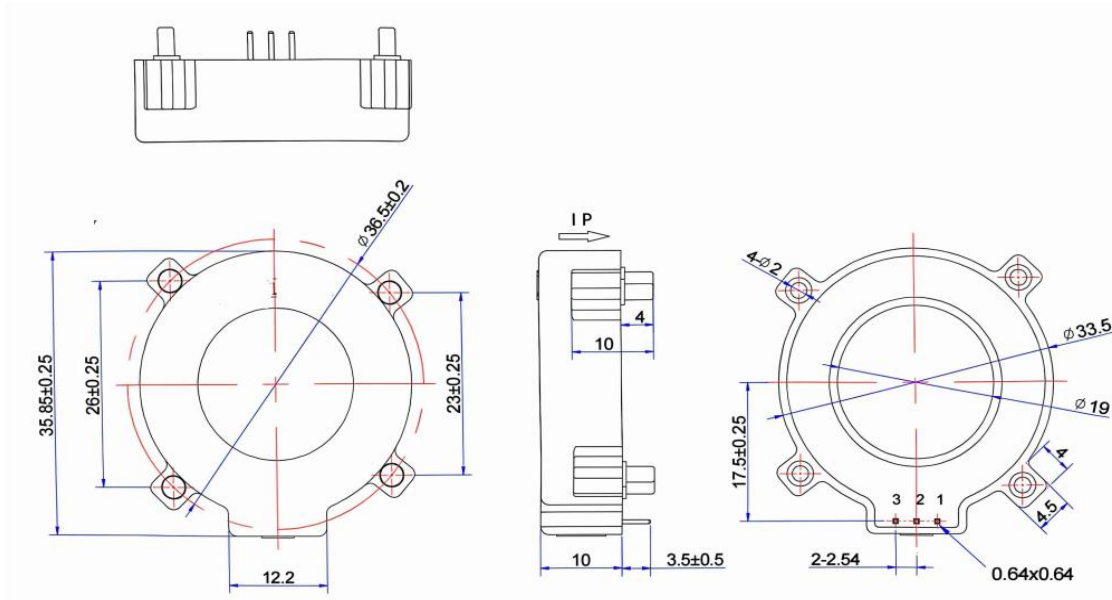


应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

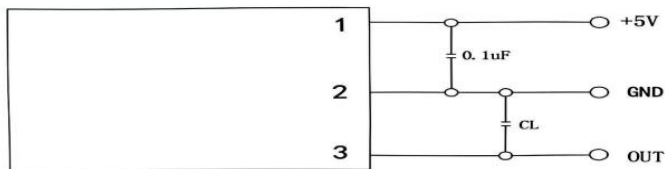
Open loop current sensor based on the principle of Hall-effect It can be used for measuring AC,DC,pulsed and mixed current.

| 电参数/Electrical characteristics | | | | | | | | |
|--------------------------------|--|--|-------------|-----------|-----------|-----------|-----------|-------|
| | 型号Type | FSK030C18 | FSK100C18 | FSK200C18 | FSK400C18 | FSK500C18 | FSK600C18 | |
| I_{PN} | 原边额定输入电流 Primary nominal input current | 30 | 100 | 200 | 400 | 500 | 600 | A |
| I_P | 原边电流测量范围 Measuring range of primary current | 0~±36 | 0~±120 | 0~±240 | 0~±480 | 0~±600 | 0~±720 | A |
| V_{SN} | 副边额定输出电压 Secondary nominal output voltage | 2.5±2 | | | | | | V |
| V_C | 电源电压 Supply voltage | +5VDC (± 5%) | | | | | | V |
| I_C | 电流消耗 Current consumption | <20 | | | | | | mA |
| V_d | 绝缘电压 Insulation voltage | 在原边与副边电路之间2.5 KV有效值/50Hz/1分钟 | | | | | | |
| ϵ_L | 线性度 Linearity | ≤0.5 | | | | | | %FS |
| V_0 | 零点失调电压 Zero offset voltage | $T_A=25^\circ\text{C}$ | 1/2VCC±0.5% | | | | | V |
| V_{OM} | 磁失调电压 Residual voltage | $I_{PN} \rightarrow 0$ | <±10 | | | | | mV |
| V_{OT} | 失调电压温漂 Thermal drift of V0 | $I_p=0$ $T_A=-25\sim+85^\circ\text{C}$ | <±0.5 | | | | | mV/°C |
| T_R | 响应时间 Response time | ≤5 | | | | | | μs |
| f | 频带宽度(-3dB) Frequency bandwidth(-3dB) | DC~50 | | | | | | kHz |
| T_A | 工作环境温度 Ambient operating temperature | -40~+125 | | | | | | °C |
| T_S | 贮存环境温度 Ambient storage temperature | -40~+150 | | | | | | °C |
| R_L | 负载电阻 Load resistance | ≥10K | | | | | | Ω |
| | 标准 Standard | GI/FS-0105 | | | | | | |

机械尺寸 Mechanical dimension



接线方式



- 1 : +5V (正电源)
- 2 : GND (地)
- 3 : OUT (输出端)

机械特性 Mechanical characteristics

| | |
|--|---|
| 一般公差 General tolerance | ± 0.5 mm |
| 其它公差执行 Other tolerance execution | GB/T 1804-2000-M |
| 固定孔尺寸 Fixing hole size | $\Phi 1.5$ mm(C2FS/SP) |
| 建议焊接温度 Recommended wave soldering temperature | $265^{\circ}\text{C} \pm 5^{\circ}\text{C}$ (C2FS/SP) |
| 连接器 Connection of secondary | $0.25\text{mm} \times 0.55\text{mm}$ ($\times 3$) |