

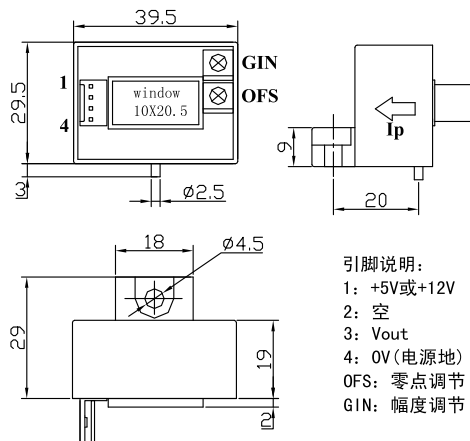


应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。
Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

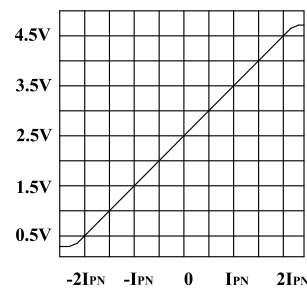
电参数/Electrical characteristics

| | 型号 Type | FS030BT | FS050BT | FS100BT | FS200BT | FS300BT | FS400BT | FS500BT | FS600BT | |
|--------------|--|------------------------------------|---------|---------|---------|---------|---------|---------|---------|------|
| I_{PN} | 原边额定输入电流 Primary nominal input current | 30 | 50 | 100 | 200 | 300 | 400 | 500 | 600 | A |
| I_P | 原边电流测量范围 Measuring range of primary current | 0~±60 | 0~±100 | 0~±200 | 0~±400 | 0~±600 | 0~±800 | 0~±900 | 0~±900 | A |
| V_{OUT} | 副边额定输出电压 Nominal output voltage | ±1(±1%)或±2(±1%) | | | | | | | | V |
| V_C | 电源电压 Supply voltage | +5V(±5%)或+12(±5%) | | | | | | | | V |
| I_C | 电流消耗 Current consumption | 25 | | | | | | | | mA |
| V_d | 绝缘电压 Insulation voltage | 在原边与副边电路之间2.5KV 有效值/50Hz/1 分钟 | | | | | | | | |
| ϵ_L | 线性度 Linearity | ±1 | | | | | | | | %FS |
| V_0 | 零点失调电压 Offset voltage | $T_A = 25^\circ C$ | | | | 2.5V±1% | | | | V |
| V_{OM} | 磁失调电压 Residual voltage | $I_{PN} \rightarrow 0$ | | | | <±20 | | | | mV |
| V_{OT} | 失调电压温漂 Thermal drift of V_0 | $I_P=0 T_A = -25 \sim +85^\circ C$ | | | | <±1 | | | | mV/C |
| T_r | 响应时间 Response time | ≤3 | | | | | | | | μs |
| f | 频带宽度(-3dB) Frequency bandwidth(-3dB) | DC ~ 20 | | | | | | | | kHz |
| T_A | 工作环境温度 Ambient operating temperature | -25 ~ +85 | | | | | | | | °C |
| T_S | 贮存环境温度 Ambient storage temperature | -40 ~ +100 | | | | | | | | °C |
| R_L | 负载电阻 Load resistance | ≥10K | | | | | | | | Ω |
| | 标准 Standard | GI/FS-0105 | | | | | | | | |

外形尺寸 (mm) /Dimensions of drawing (mm)



输入电流—输出电压



注: 此图为输出电压在1V状态下

使用说明/Remarks

- 错误的接线可能导致传感器损坏。传感器通电后，当被测电流从传感器箭头方向穿过，即可在输出端测得同相电压值。
 - 传感器的输出幅度可根据用户需求进行适当的调节。
 - 可按用户需求定制不同额定输入电流和输出电压的传感器。
 - 原边电流测量范围是在额定输出电压1V状态下。
- Incorrect connection may lead to the damage of the sensor.
· V_{OUT} is positive when the I_P flows in the direction of the arrow.