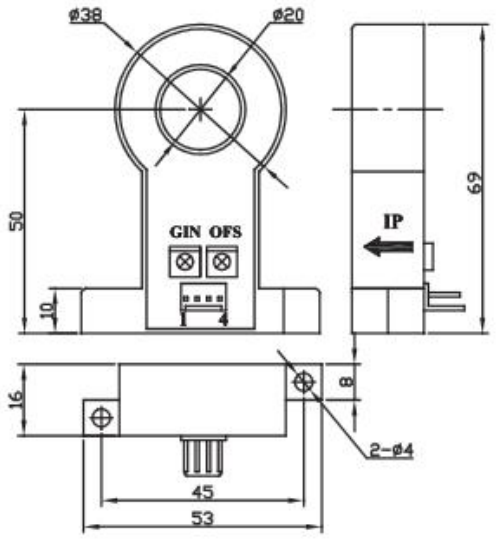
# FS100ET5V 系列霍尔电流传感器

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 。

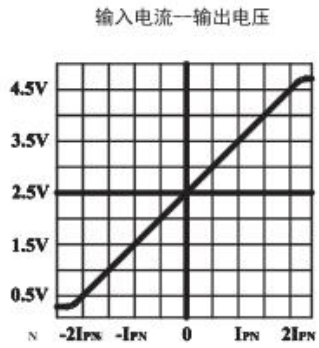
The current sensor using the Hall effect open-loop principle can measure DC, AC, pulse and various irregular waveforms of current under the condition of electrical isolation.

| 电参数/Electrical characteristics | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 型号<br>Type | FS050ET | FS100ET | FS200ET | FS300ET | FS500ET | FS800ET | |
| $I_{PN}$ | 原边额定输入电流<br>Rated input current on primary side | 50 | 100 | 200 | 300 | 500 | 800 | A |
| Ip | 原边电流测量范围<br>Primary current measurement range | 0~±100 | 0~±200 | 0~±400 | 0~±600 | 0~±800 | 0~±800 | A |
| $V_{OUT}$ | 副边额定输出电压<br>Rated output voltage of secondary side | ±1或±2(±1%) | | | | | | V |
| Vc | 电源电压<br>Supply voltage | +5(±5%)or+12V | | | | | | V |
| Ic | 电流消耗<br>Current consumption | 25 | | | | | | mA |
| $V_d$ | 绝缘电压<br>Insulation voltage | 在原边与副边电路之间2 .5KV有效值/50Hz/1分钟 | | | | | | |
| e | 线性度<br>linearity | ±1 | | | | | | %FS |
| $V_o$ | 零点失调电压<br>Zero offset voltage | TA=25℃ | 2.5V±1% | | | | | MV |
| Vo | 磁失调电压<br>Magnetic offset voltage | Ip→0 | <±20 | | | | | mV |
| Vo | 失调电压温漂<br>Offset voltage temperature drift | Im=0 TA=-25～+85℃ | <±0.5 | | | | | mV/℃ |
| Tr | 响应时间<br>Response time | ≤3 | | | | | | μs |
| f | 频带宽度(-3dB)<br>Band width (-3dB) | DC～20 | | | | | | kHz |
| T | 工作环境温度<br>Operating ambient temperature | -40～+85 | | | | | | ℃ |
| Ts | 贮存环境温度<br>Storage ambient temperature | -40～+100 | | | | | | ℃ |
| R | 负载电阻<br>Load resistance | ≥10K | | | | | | Ω |
| | 标准<br>Standard | GI/FS-0105 | | | | | | |

外形尺寸(㎜)/Dimensions of drawing(mm)




引脚说明：
1：+5V
2：空
3：Vout
4：0V(电源地)
OFS：零点调节
GIN：幅度调节




使用说明/Instructions

1. 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。
   Incorrect wiring may cause damage to the sensor. After the sensor is powered on, when the measured current passes through the arrow direction of the sensor, the in-phase voltage value can be measured at the output end.
2. 传感器的输出幅度可根据用户需求进行适当的调节。
   The output amplitude of the sensor can be adjusted according to the user's needs.
3. 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。
   Sensors with different rated input current and output voltage can be customized according to user requirements.