



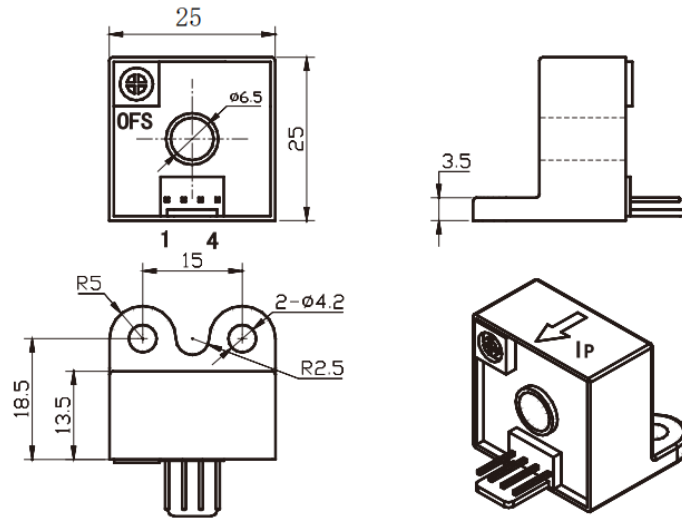
FSM030GBT5 系列霍尔电流传感器

应用霍尔效应闭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 closed-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 Type	FSM010GBT5	FSM020GBT5	FSM030GBT5	FSM040GBT5	
I_{PN}	原边额定输入电流 Primary nominal input current	10	20	30	40	A
I_p	原边电流测量范围 @2.5±1V Measuring range of primary current	0~±20	0~±40	0~±60	0~±80	A
V_{OUT}	副边额定输出电压 Nominal output voltage	1V或2V (±0.5%)				V
V_c	电源电压 Supply voltage	+5 (±5%)				V
I_c	电流消耗 Current consumption	额定电流时 16~35				mA
V_a	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	<0.2				%FS
V_o	零点失调电压 Offset voltage	$T_A=25^{\circ}\text{C}$ 2.5±1%				mV
V_{OM}	磁失调电压 Residual voltage	$I_{pn} \rightarrow 0$ <±15				mV
V_{OT}	失调电压温漂 Thermal drift of V_O	$I_p=0$ $T_A=-25\sim+85^{\circ}\text{C}$ <±0.5				mV/°C
T_r	响应时间 Response time	≤1				μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC~100				kHz
T_A	工作环境温度 Ambient operating temperature	-40~+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
m	质量(约) Quality (approx)	12				g
	标准 Standard	GI/FS-0105				

外形尺寸(mm)/Dimensions of drawing(mm)



引脚说明: 1, +5V 2, NC 3, Vout 4, 0V(电源地) OFS, 零点调节

Pin description: 1, +5V 2, NC 3, Vout 4, 0V(power ground) OFS, zero adjustment

使用说明/Instructions

- 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..
- 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.
- 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.