



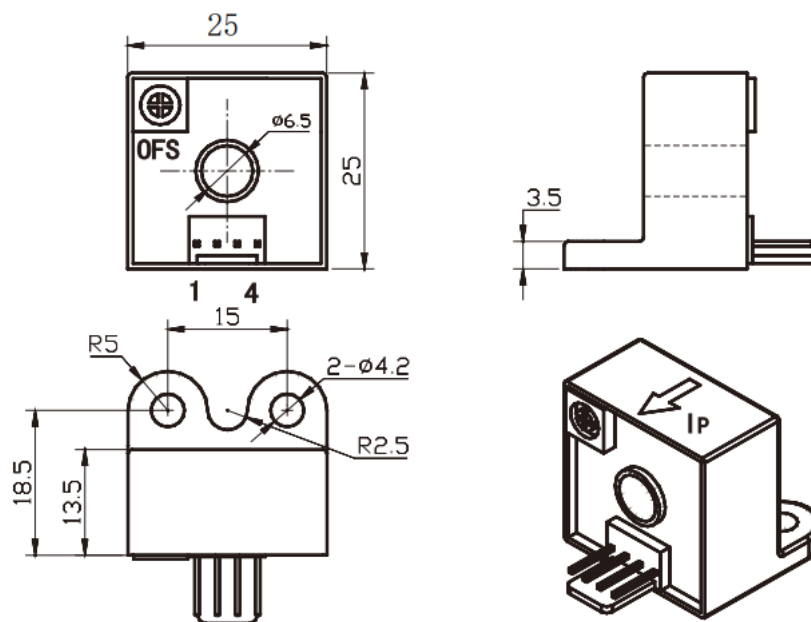
FSM050GB系列霍尔电流传感器

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	FSM010GB	FSM020GB	FSM025GB	FSM050GB	
I_{PN}	原边额定输入电流 Primary nominal input current	10	20	25	50	A
I_p	原边电流测量范围 Measuring range of primary current	$0 \sim \pm 20$	$0 \sim \pm 40$	$0 \sim \pm 50$	$0 \sim \pm 80$	A
V_{OUT}	副边额定输出电压 Nominal output voltage	$4 \pm 1\%$				V
V	电源电压 Supply voltage	$\pm 12 \sim \pm 15 (\pm 5\%)$				V
I_c	电流消耗 Current consumption	额定电流时 16-35				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	< 0.2				%FS
V_o	零点失调电压 Offset voltage	$T_A = 25^\circ\text{C}$ $< \pm 30$				mV
V_{OM}	磁失调电压 Residual voltage	$I_M \rightarrow 0$ $< \pm 20$				mV
V_{OT}	失调电压温漂 Thermal drift of V_O	$I_p = 0$ $T = -25 \sim +85^\circ\text{C}$ $< \pm 1$				mV/ $^\circ\text{C}$
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	$-25 \sim +85$				$^\circ\text{C}$
T_s	贮存环境温度 Ambient storage temperature	$-40 \sim +100$				$^\circ\text{C}$
R_L	负载电阻 Load resistance	$\geq 10K$				Ω
m	质量(约) Quality(approx)	12				g
	标准 Standard	Q/320115QHKJ01-2010				

外形尺寸(mm)/Dimensions of drawing(mm)



引脚说明: 1, +15V 2, -15V 3, Vout 4, 0V(电源地) OFS, 零点调节
Pin description: 1,+15V 2,-15V 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.