



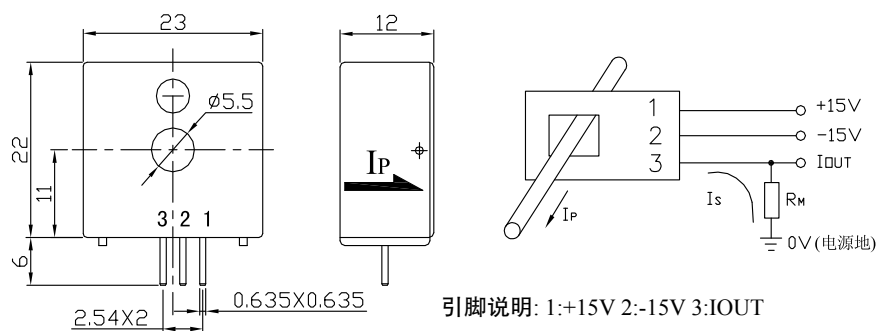
应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。
Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

电参数/Electrical characteristics

	型号 Type	FSM010G	FSM020G	FSM025G	FSM040G	
I_{PN}	原边额定输入电流 Primary nominal input current	10	20	25	40	A
I_P	原边电流测量范围 Measuring range of primary current	0~±20	0~±40	0~±50	0~±80	A
I_{SN}	副边额定输出电流 Secondary nominal output current	10	20	25	25	mA
K_N	匝数比 Conversion ratio	1:1000	1:1000	1:1000	1:1600	
R_M	测量电阻($V_C=±15V/I_{PN}$) Measuring resistance ($V_C=±15V/I_{PN}$)	1230(max)	594(max)	467(max)	420(max)	Ω
V_C	电源电压 Supply voltage	±12~±15V(±5%)				V
I_C	电流消耗 Current consumption	10+ I_s				mA
I_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	<0.1				%FS
X	精度 Accuracy	$T_A=25^\circ C$	<±0.7			%
V_O	零点失调电流 Zero offset current	$T_A=25^\circ C$	<±0.15			mA
V_{OT}	失调电流温漂 Thermal drift of I_O	$I_P=0 T_A=-25\sim+85^\circ C$	<±0.5			mA
T_R	响应时间 Response time	<500				ns
di/dt	跟随精度 di/dt accurately followed	>50				A/uS
f	频带宽度(-1dB) Frequency bandwidth(-1dB)	DC~200				kHz
T_A	工作环境温度 Ambient operating temperature	-25~+85				$^\circ C$
T_S	贮存环境温度 Ambient storage temperature	-40~+100				$^\circ C$
R_s	副边线圈内阻($T_A=25^\circ C$) Secondary coil resistance($T_A=25^\circ C$)	43	43	43	90	Ω
	标准 Standard	GI/FS-0105				

外形尺寸 (mm) /Dimensions of drawing (mm)

外部接线图



引脚说明: 1:+15V 2:-15V 3:IOUT

Elucidation: 1:+15V 2:-15V 3:IOUT

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流值。
- Incorrect connection may lead to the damage of the sensor. ISN is positive when the IP flows in the direction of the arrow.
- Dynamic performance (di/dt and response time) are best with a primary bar in the center of the through-hole.