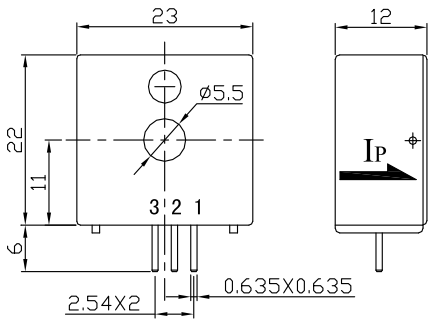
FSM040GT 系列霍尔电流传感器
FSM040GT Hall–effect Current Sensor Series

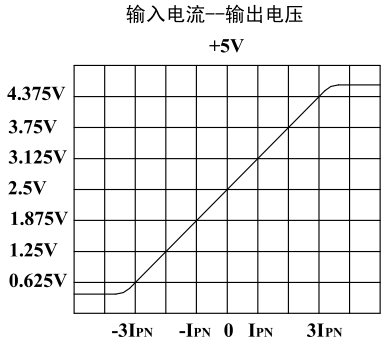
应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。
Open loop current sensor based on the principle of Hall–effect. It can be used for measuringAC,DC,pulsedand mixed current.

电参数/Electrical characteristics

	型号 Type	FSM010GT	FSM020GT	FSM025GT	FSM040GT	
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
R_M	取样电阻 Internal measuring resistance	100±0.5%	50±0.5%	50±0.5%	50±0.5%	Ω
V_{SN}	副边额定输出电压 Secondary nominal output voltage	0.625±0.5%	0.625±0.5%	0.625±0.5%	0.625±0.5%	V
K_N	匝数比 Conversion ratio	1:1000	1:1000	1:1000	1:1600	
V_C	电源电压 Supply voltage	+5(±5%)				V
I_C	电流消耗 Current consumption	I_P=0	20			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℃	<±0.7			%
V_O	零点失调电压 Zero offset current	I_P=0 T_A =25℃	2.5±1%			V
V_{OT}	失调电压温漂 Thermal drift of I0	I_P=0 T_A =-25～+85℃	<±0.5			mA/℃
V_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				℃
T_S	贮存环境温度 Ambient storage temperature	-40～+100				℃
	标准 Standard	GI/FS-0105				

外形尺寸（mm）/Dimensions of drawing (mm)





引脚说明: 1:+5V 2:0V(GND） 3:VOUT
Elucidation:1:+5V 2:OV(GND)3:Vout

使用说明/Remarks

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。
2、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。
·Incorrect connection may lead to the damage of the sensor. VOUT 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.