

FS040G 系列霍尔电流传感器 FS040G Hall-effect Current Sensor Series

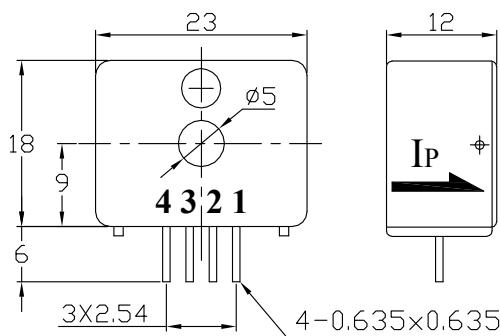


应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。
Open loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

电参数/Electrical characteristics

	型号 Type	FS010G	FS020G	FS030G	FS040G	
IPN	原边额定输入电流 Primary nominal input current	10	20	30	40	A
IP	原边电流测量范围 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		1±1%			V
V _C	电源电压 Supply voltage			±12 ~ ±15(±5%)		V
I _C	电流消耗 Current consumption	V _C =±15V		<20		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			<1		%FS
V _O	零点失调电压 Offset voltage	T _A =25°C		<±30		mV
V _{OM}	磁失调电压 Residual voltage	IPN→0		<±20		mV
V _{OT}	失调电压温漂 Thermal drift of V _O	IPN=0 T _A =-25 ~ +70°C		<±1		mV/°C
T _R	响应时间 Response time			≤3		μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)		DC ~ 20			kHz
T _A	工作环境温度 Ambient operating temperature			-25 ~ +70		°C
T _S	贮存环境温度 Ambient storage temperature			-40 ~ +85		°C
R _L	负载电阻 Load resistance			≥10K		Ω
	标准 Standard		GI/FS-0105			

外形尺寸 (mm) /Dimensions of drawing (mm)



引脚说明: 1: + 15V 2: 0V(电源地) 3: Vout 4: -15V
Elucidation: 1:+15V 2:0V(GND) 3:VOUT 4:-15V

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压值。
 - 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.