

FSM080RT5 系列霍尔电流传感器

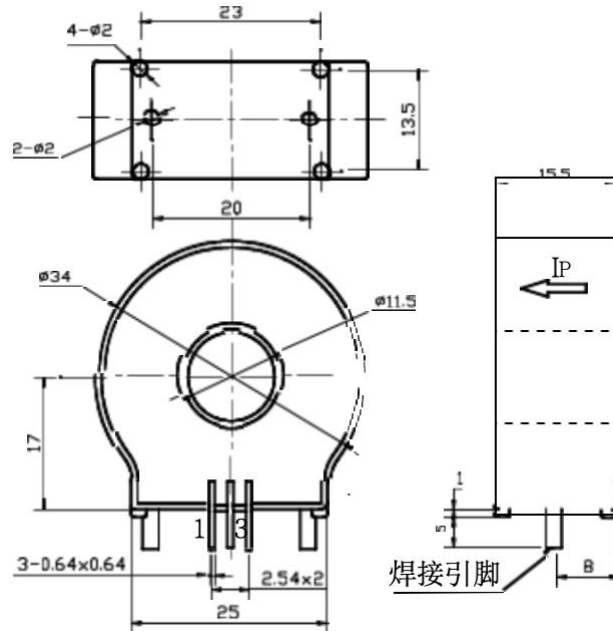
应用霍尔效应闭环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。
Open loop current sensor based on the principle of Hall-effect It can be used for measuring AC,DC,pulsed and mixed current.



电参数/Electrical characteristics					
	型号 Type	FSM025RT5	FSM040RT5	FSM080RT5	
PN	原边额定输入电流 Primary nominal input current	25	40	80	A
P	原边电流测量范围 Measuring range of primary current	0~±25	0~±40	0~±80	A
VOUT	副边额定输出电压 Nominal output voltage	2±0.5%			V
KN	匝数比 turns ratio	1:2000			
VC	电源电压 Supply voltage	+5(±5%)			V
IC	电流消耗 (额定电流时) Current consumption(At rated current)	22.5	30	50	mA
Vd	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			
εL	线性度 Linearity	<0.2			%FS
X	精度 accurate	T _A =25°C V _c =+5V	±1		%
V0	零点失调电压 Offset voltage	T _A =25°C	2.5±0.02		V
VOM	磁失调电压 Residual voltage	I _p →0	<±0.02		V
VOT	失调电压温漂 Thermal drift of V0	I _p =0 T _A =-40~+125°C	<±0.5		mV/°C
VST	增益电压温漂 Gain Voltage Temperature Drift	I _p =I _{PN} T _A =-40~+125°C	<±0.5		mV/°C
Tr	响应时间 Response time	<1			μs
f	频带宽度(-1dB) Frequency bandwidth(-1dB)	DC~100			kHz
TA	工作环境温度 Ambient operating temperature	-40~+100			°C
TS	贮存环境温度 Ambient storage temperature	-40~+125			°C
RS	副边线圈内阻(T _A =25°C) Internal resistance of the	40			Ω

	secondary coil (TA=25°C)		
m	质量(约) Weight (approx.)	25	g
	标准 Standard	GI/FS-0105	

外形尺寸(mm)/Dimensions of drawing(mm)



Elucidation: 1, +5V 2, 0V 3, VOUT

Remarks

1. Incorrect wiring may result in damage to the sensor. After the sensor is energized, when the measured current passes through the sensor in the direction of the arrow, the same-phase current value can be measured at the output.
2. The dynamic characteristics (di/dt and response time) are best when the input current row completely fills the primary side perforation.