

FSK500D 新能源电动汽车传感器



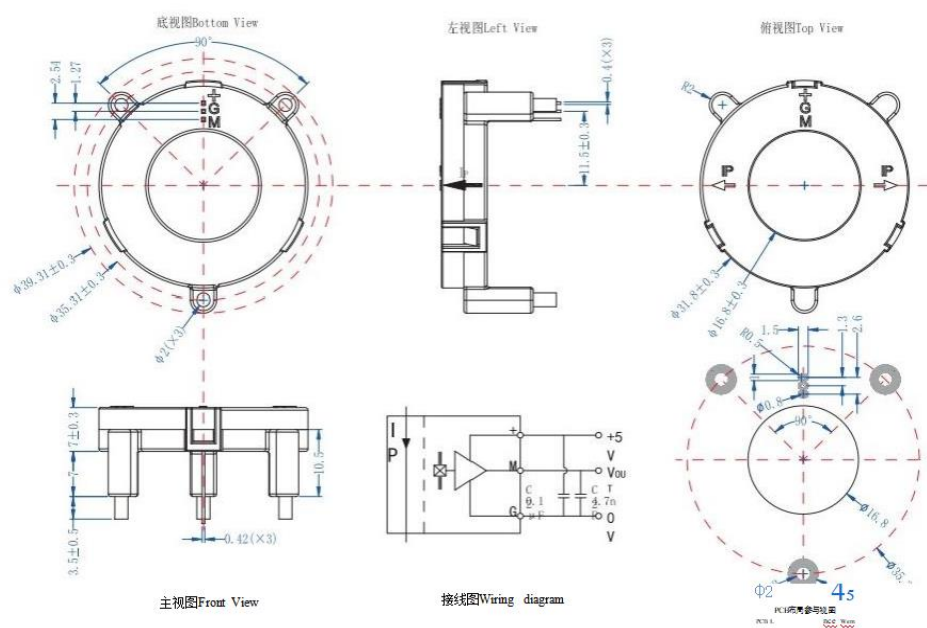
应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

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	FSK100D	FSK200D	FSK400D	FSK500D	FSK600D	FSK800D	
I_{pN}	原边额定输入电流 Primary nominal input current	100	200	400	500	600	800	A
I_p	原边电流测量范围 Measuring range of primary current	0~±120	0~±240	0~±480	0~±600	0~±720	0~±960	A
V_{sN}	副边额定输出电压 Secondary nominal output voltage	@RL=4.7K/25℃ 1/2V _{cc} ±2						V
V_c	电源电压 Supply voltage	+5V±5%						V
I_c	电流消耗 Current consumption	@ I_{pN} <15						mA
V_a	绝缘电压 Insulation voltage	50Hz, 1min, 3KV						
e_L	线性度 Linearity	@ I_{pN} T=25℃ <±0.5						%FS
χ	精度 Accuracy	@ I_{pN} T=25℃ <±1						%
V_0	零点失调电压 Offset voltage	@T=25℃ IP=0 1/2V _{cc} 0.015						V
V_{ow}	磁失调电压 Residual voltage	@T=25℃ $I_{pN} \rightarrow 0$ <±10						mV
V_{or}	失调电压漂移 Thermal drift of V0	@-40℃ ~+125℃ ≤±0.5						mV/℃

T_r	响应时间 Response time	@90% I_{PN} <5	μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	 DC~100	kHz
T_A	工作环境温度 Ambient operating temperature	 -40~+85	$^{\circ}C$
T_s	贮存环境温度 Ambient storage temperature	 -40~+125	$^{\circ}C$
R_L	负载电阻 Load resistance	 ≥ 4.7	K Ω
	标准 Standard	 GI/FS-0105	

外形尺寸 (mm) /Dimensions of drawing(mm)



机械特性

一般公差 ± 0.3 mm
其它公差执行 GB/T 1804-2000-M
固定针尺寸 $\phi 2.0\text{mm}(\times 4)$
连接器 $0.42\text{mm} \times 0.4\text{mm}(\times 3)$

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。
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.
2. 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.
3. 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.