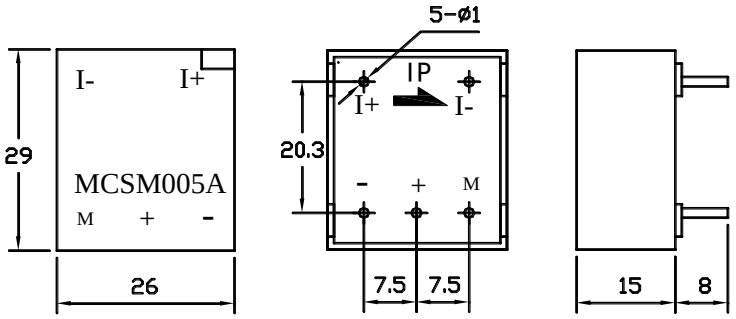
麦可一科技
Mycoiltech

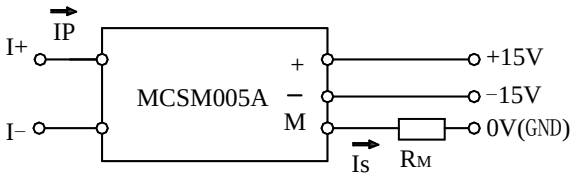
MCSM005A Hall-effect Current Sensor Series

Closed loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

Electrical characteristics						
	Type	MCSM001A	MCSM002A	MCSM003A	MCSM005A	
I_{PN}	Primary nominal input current	1	2	3	5	A
I_P	Measuring range of primary current	0~±2	0~±4	0~±6	0~±10	A
I_{SN}	Secondary nominal output current	25	25	25	25	mA
K_N	Conversion ratio	25:1000	12"960	8:960	5:1000	
R_M	Measuring resistance(V_C=±15V)	±I_{PN} max	100~460	±I_{PN} max	100~205	Ω
V_C	Supply voltage	±12~±15(±5%)				V
I_C	Current consumption	V_C=±15V	10+I_S			mA
V_D	Insulation voltage	AC/50HZ/1 min	2.5			kV
ε L	Linearity	<0.2				%FS
X	Accuracy	T_A=25℃ V_C=±15V	<±0.7			%
I_O	Zero offset current	T_A=25℃	<±0.15			mA
I_{OM}	Residual voltage	I_{PN}→0	<±0.15			mA
I_{OT}	Thermal drift of I_O	I_P=0 T_A= - 25~+85℃	<±0.5			mA
T_R	Response time	<1				μs
f	Frequency bandwidth(-1dB)	DC~20				KHZ
T_A	Ambient operating temperature	- 25~+85				℃
T_S	Ambient storage temperature	- 40~+100				℃
R_S	Secondary coil resistance(T_A=85℃)	50				Ω
	Standard	Q/3201CHGL02-2007				

Dimensions of drawing (mm) **Connection**





Elucidation：+:+15V –: –15V M:I_{OUT}

Remarks

- **Incorrect connection may lead to the damage of the sensor.**
- **I_{SN} is positive when the I_P flows in the direction of the arrow.**