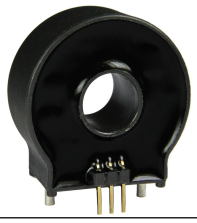
麦可一科技
Mycoiltech

MCSM100EE Hall-effect Current Sensor Series

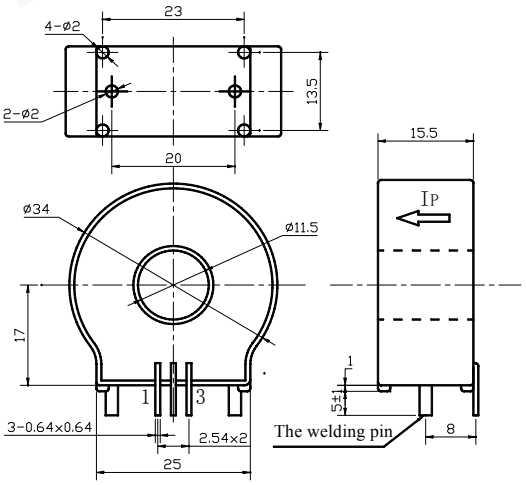


Closed loop current sensor based on the principle of Hall-effect. It can be used for measuring AC,DC,pulsed and mixed current.

Electrical characteristics

	Type	MCSM025EE	MCSM040EE	MCSM075EE	MCSM0100EE	
I_{PN}	Primary nominal input current	25	50	75	100	A
I_P	Measuring range of primary current	0～±37.5	0～±75	0～±112.5	0～±150	A
I_{SN}	Secondary nominal output current	25	25	37.5	50	mA
K_N	Conversion ratio	1:1000	1:2000	1:2000	1:2000	
R_M	Measuring resistance (V_C=±15V)	0-495	0-470	0-290	0-205	Ω
V_C	Supply voltage	±15(±5%)				V
I_C	Current consumption	10+IS				mA
V_D	Insulation voltage	AC/50Hz/1min	2.5			KV
εL	Linearity	<0.1				%FS
X	Accuracy	T_A=25℃	<±0.8			%
I_O	Zero offset voltage	T_A=25℃	±0.02			mA
I_{OM}	Residual current	I_P→0	<±0.02			mA
I_{OT}	Thermal drift of I_0	I_P=0 T_A=-25～+85℃	<±0.005			mV/℃
T_R	Response time	<1				us
f	Frequency bandwidth(-1dB)	DC~100				μs
T_A	Ambient operating temperature	-25~+85				kHz
T_S	Ambient storage temperature	-40~+100				℃
R_S	Secondary coil resistance(T_A=25℃)	35	60	60	60	℃
m	Mass	25				Ω
	Standard	Q/320115QHKJ01-2013				g

Dimensions of drawing (mm)



Elucidation: 1:+15V 2:0V 3:I_{OUT}

Remarks

- **Incorrect connection may lead to the damage of the sensor.**
- **I_{SN} is positive when the IP flows in the direction of the arrow.**
- **. R_M is in the measurement of DC current. If the measurement of AC current, R_M is reduced to 70%.**