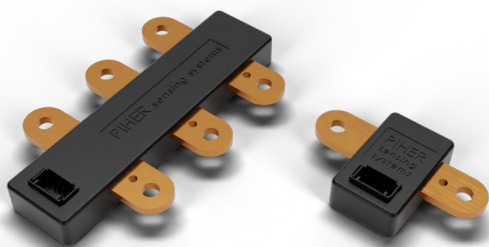


Current Sensor

Automotive TMR Current Sensor



DESCRIPTION

Piher Sensing Systems launches a TMR current sensor that generates a ratiometric analog output voltage signal proportional to the current flowing through the integrated conductor.

Compared to conventional Hall-effect current sensors, this sensor provides more accurate measurement, a higher sampling rate and lower temperature drift. It has been designed for accurate measurement of currents in automotive battery management and motor control applications.

KEY FEATURES

- ▶ Current transducer based on TMR technology
- ▶ Up to $\pm 4,000$ A
- ▶ Fastening ready
- ▶ Analog ratiometric output
- ▶ Non-intrusive technology
- ▶ Galvanic separation between power and control
- ▶ Immunity to common mode fields

APPLICATIONS

- ▶ Battery management systems
- ▶ Over-current detection
- ▶ EV motor inverters
- ▶ DC/DC converters

SPECIFICATIONS

Parameter	
Current measuring range	up to $\pm 4,000$ A
Supply voltage	4.75 V to 5.5 V
Supply current	6 mA to 9 mA
Current type	AC, DC
Output voltage	0.5 V to 4.5 V $\pm 10\%$
ESD protection	± 2 kV
Accuracy at 25°C*	< 1%
Operating temperature	-40°C to 125°C
Response time	~ 300 nsec
Frequency bandwidth	DC to 1 MHz
Mounting type	Integrated busbar with hole fastening

* Depending on measurement range



Please always use the latest updated datasheets and 3D models published on our website.

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