

CURRENT SENSOR ICS

Dimac Red can provide three kind of current sensors NVE Corporation.

Key Features:

- Small dimensions 2.5 x 2.5 mm
- Reliable; proven in medical, aerospace
- Low power consumption
- Very high magnetic sensitivity

IN-CIRCUIT

ACT001-10E

High-linearity, extremely low-hysteresis TMR current sensor

The ACT001-10E is a high-linearity, extremely low-hysteresis current sensor manufactured with NVE's state-of-the-art tunneling magnetoresistance (TMR) technology. The sensor has an on-chip current strap close to TMR sensor elements that enable highly sensitive and accurate measurements. The sensor output is a bipolar voltage signal proportional to the current through the strap.

Part Number	Linear Meas. Range (mA)		Sensitivity (mV/V/mA)	Max. Non-Linearity	Max. Op. Temp. (°C)	Typical Bridge Resistance	Package
	min	max					
ACT001-10	-500	500	0.04	1%	125	15 kOhm	DFN6
AAV003-10	-80	80	0.08	1%	85	7 kOhm	DFN6

AAV003-10E

high linearity, extremely low hysteresis GMR current sensor

The AAV003-10E is a high linearity, extremely low hysteresis GMR current sensor with an on-chip current strap. A GMR bridge sensor element close to the current strap senses the magnetic field created by the current. The GMR sensor element uses a unique, bipolar output, low hysteresis GMR material for excellent accuracy.



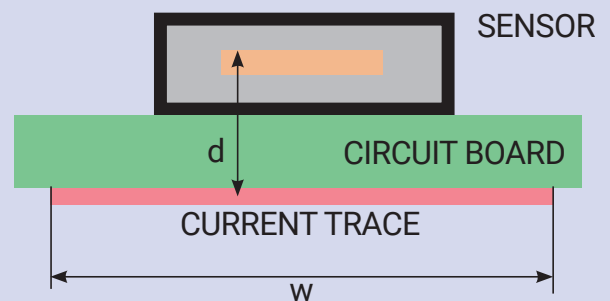
OVER TRACE

ALT023

ALT02x sensors are Tunneling Magnetoresistance (TMR) analog bridge sensors with an extraordinary amount of signal and wide linear range.

AAL024

NVE's analog GMR sensors have high sensitivity, excellent temperature stability, and small size. Their versatility and wide sensing range makes them an excellent choice for a variety of analog sensing applications



Part Number	Interface	Polarity	Field Range	Typ. Current	Package	Breakout Board	Evaluation Kit
SM124-10E	I ² C	Omnipolar	0-4 mT	0-10 A	2.5 x 2.5 mm DFN6	AG958-07E	AG952-07E
SM324-10E		Bipolar	±2 mT	0-10 A		AG960-07E	AG951-07E
AAL024-10E	Analog Bridge	Omnipolar	0-1.5 mT	0-10 A		AG035-06	AG905-07E
ALT023-10E		Bipolar	±1 mT	0-5 A			AG905-07E