

Product Information

Programmable Current Sensor IC

MLX91206CAL—MLX91206CAH

The MLX91206 is a monolithic sensor IC featuring the Triaxis Hall technology. Conventional planar Hall technology is only sensitive to the flux density applied orthogonally to the IC surface. The Triaxis Hall sensor is sensitive to the flux density applied parallel to the IC surface. This is obtained through an Integrated Magneto-Concentrator (IMC), which is deposited on the CMOS die. The IMC technology is automotive qualified.

The transfer characteristic of the MLX91206 is fully customer programmable (offset, gain, clamping levels, diagnostic functions...). The linear analog output allows using the sensor in applications where a very fast response of <10 sec is required.

MLX91206CAL: **Low** Magnetic Field (10mT)

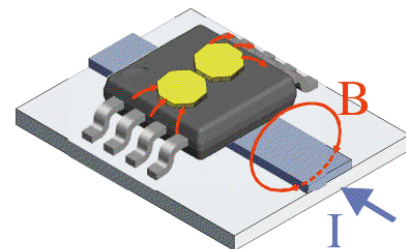
MLX91206CAH: **High** Magnetic Field (25mT)

Applications

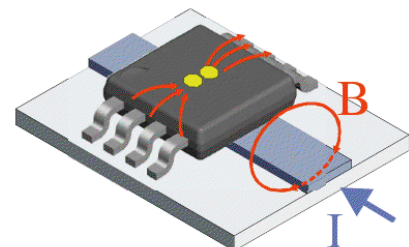
- Contact-less Current Measurement (AC and DC)
- Non Intrusive Current Measurement
- Battery Current Management / Charger
- HEV and EV Inverters (Motor Controller)
- AC-DC and DC-DC Converters (Solar Power)
- Power Monitoring (Server and Telecommunication)
- Power Supplies (UPS and SMPS)
- Over-Current Protection / Smart Fuse
- Magnetic Field Monitoring

Features

- Programmable high speed Triaxis current sensor
- Wideband: DC to 90kHz
- Short response time
- Magnetic concentrator (IMC) feature higher S/N
- Selectable ratio-metric output
- Fast analog output (12 bits resolution DAC)
- PWM output (12 bits resolution ADC)
- Thermometer output
- Over voltage and reverse polarity protection
- Broken track diagnostic
- Programmable switch function
- 17 bit ID number
- Single die SOIC8 package RoHS compliant
- Lead free component, suitable for lead free soldering, MSL3



MLX91206CAL: Low Magnetic Field



MLX91206CAH: High Magnetic Field

Bus ICs

BLDC Motor Control ICs

Pressure Sensors

Wireless ICs

Hall Effect ICs And Sensors

Optoelectronic Sensors

Sensor Interface ICs

Infrared Sensors

