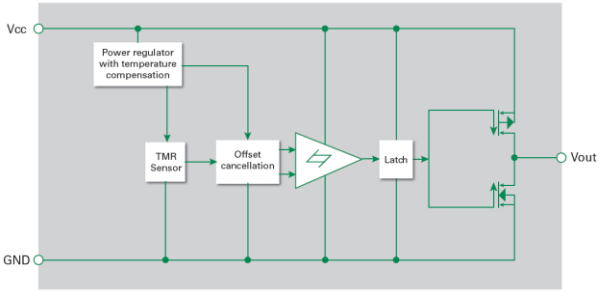
LF11215TMR Bipolar Magnetic Switch

Problem/Solution

Battery-operated devices need to consume minimal power to maximize operating life, and automotive and industrial automation devices require high sensitivity and reliability. The LF11215TMR Tunneling Magnetoresistance (TMR) technology-based bipolar switch offers high magnetic sensitivity with a typical operating point of just 17 Gauss and has ultra-low power CMOS circuitry, achieving a remarkably low 1.5 µA input. This switch provides high reliability in harsh environments. The switch integrates TMR sensing, on-chip voltage generation, and push-pull CMOS output in a compact SOT23-3 package.

Technical Resources

Series Page | Datasheet | Tech Info



Benefits

- High sensitivity and high reliability
- Low power consumption
- High speed
- High tolerance to external magnetic field Interference
- Excellent thermal stability
- Compact size

Features

- Tunneling Magnetoresistance (TMR) technology
- 1.5uA supply current
- High frequency up to 1000Hz
- Schmitt trigger for noise rejection
- Temperature-compensated supply voltage
- SOT23-3 Package

Markets/Applications

- Consumer electronic portable tool sensors
- Automotive electronic position and speed sensors
- Industrial automation and robotic proximity switches
- Building automation, smart gas and water flow rate and direction detection

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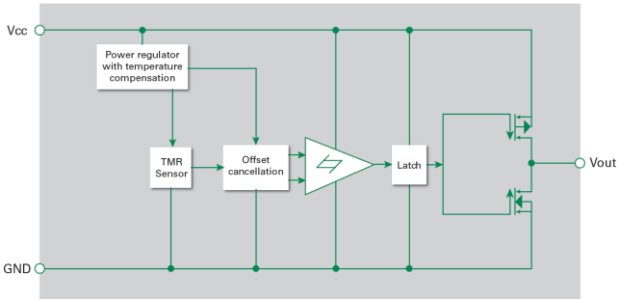
LF21112TMR Omnipolar Magnetic Switch

Problem/Solution

When battery-powered and energy-harvesting devices require magnetic sensing, tunneling magnetoresistance (TMR) switches offer a superior solution. Unlike traditional Hall-effect sensors or older magnetic switches, the LF21112TMR magnetic switch enables more accurate detection with significantly less power draw. In rugged automotive and industrial environments, TMR switches provide solid-state reliability. The LF21112TMR operates in low-voltage circuits, ranging from 1.8 V to 5 V, senses along the x-axis from either magnetic pole, and has compact SOT23-3 packaging.

Technical Resources

Series Page | Datasheet | Tech Info



Benefits

- High sensitivity and reliability
- Ultra Low power consumption
- High tolerance to External Magnetic Field Interference
- Excellent thermal stability
- Compact size

Features

- Tunneling Magnetoresistance (TMR) technology
- 200nA supply current
- Schmitt trigger for noise rejection
- Temperature-compensated supply voltage
- SOT23-3 Package

Markets/Applications

- Consumer electronic cover and lid detection
- Automotive door, trunk, and hood sensors
- Industrial automation proximity detection
- Building automation smart gas, water, and heat meter tamper detection

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