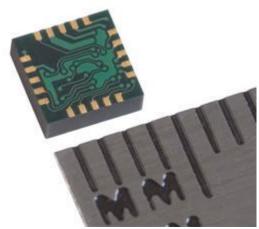




HMC5843 3-Axis Acceleration Sensor

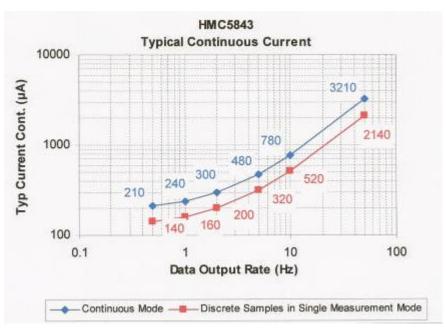
General Description:

The Honeywell HMC5843 is a surface mount multi-chip module designed for low field magnetic sensing with a digital interface for applications such as low cost compassing and magnetometry. The HMC5843 includes our state of the art 1043 series magneto-resistive sensors plus Honeywell developed ASIC containing amplification, strap drivers, offset cancellation, 12-bit ADC and an I₂C serial bus interface. The HMC5843 is in a 4.0 by 4.0 by 1.3mm surface mount leadless chip carrier (LCC). Applications for the HMC5843 include Consumer Electronics, Auto Navigation Systems, Personal Navigation



Devices, and Magnetometers. The HMC5843 utilizes Honeywell's Anisotropic Magnetoresistive (AMR) technology that provides advantages over other magnetic sensor technologies. The sensors feature precision in-axis sensitivity and linearity, solid-state construction with very low cross-axis sensitivity designed to measure both direction and magnitude of Earth's magnetic fields, from tens of micro-gauss to 6 gauss. Honeywell's Magnetic Sensors are among the most sensitive and reliable low-field sensors in the industry.

Honeywell continues to maintain product excellence and performance by introducing innovative solid-state magnetic sensor solutions. These are highly reliable, top performance products that are delivered when promised. Honeywell's magnetic sensor solutions provide real solutions you can count on.





Key Features:

- 3-Axis Magneto resistive Sensors and ASIC in a Single Package
- Small Size for Highly Integrated Products. Just Add a Micro-Controller Interface, Plus Two External SMT Capacitors
- Low Cost
- Designed for High Volume, Cost Sensitive OEM Designs
- 4.0 x 4.0 x 1.3mm Low Height Profile LCC Surface Mount Package
- Easy to Assemble & Compatible with High Speed SMT Assembly
- Low Voltage Operations (2.5 to 3.3V)
- Compatible for Battery Powered Applications
- Built-In Strap Drive Circuits
- Set/Reset and Offset Strap Drivers for Degaussing, Self Test, and Offset Compensation
- I2C Digital Interface
- Popular Two-Wire Serial Data Interface for Consumer Electronics
- Lead Free Package Construction
- Complies with Current Environmental Standards
- Wide Magnetic Field Range (+/-6 Oe)
- Sensors Can Be Used in Strong Magnetic Field Environments
- Available in Tape & Reel Packaging
- High Volume OEM Assembly

Applications:

- Compassing
- Magnetometer

Related Products Information:

Mfr Part #	Farnell #	Newark #	Description
HMC5843	1784722	06R2312	3-Axis Acceleration Sensor

