

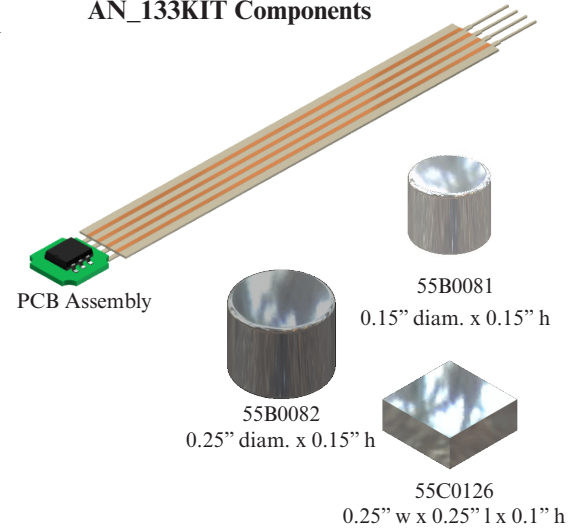
The AN_133KIT consists of a EM-3242 angle sensor mounted on a small 0.25 in. square PCB with a 6 in. flat cable. Also included in the kit are three SmCo24 magnets compatible with the angle sensor; a 0.25 in. diameter magnet, a 0.15 in. diameter magnet and a 0.25 in. square magnet. The sensor works well with smaller magnets, but with less air gap. See Reference Design RD101_EM3242 for details.

This kit eliminates the need to design a PCB for testing which makes it convenient to evaluate the EM-3242 for compatibility with the user’s applications. See EM-3242 specification for details.

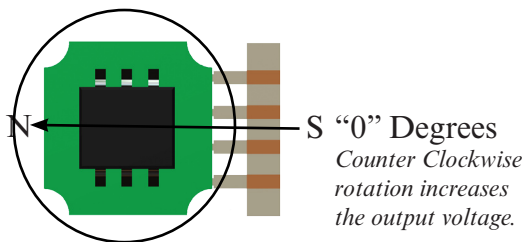
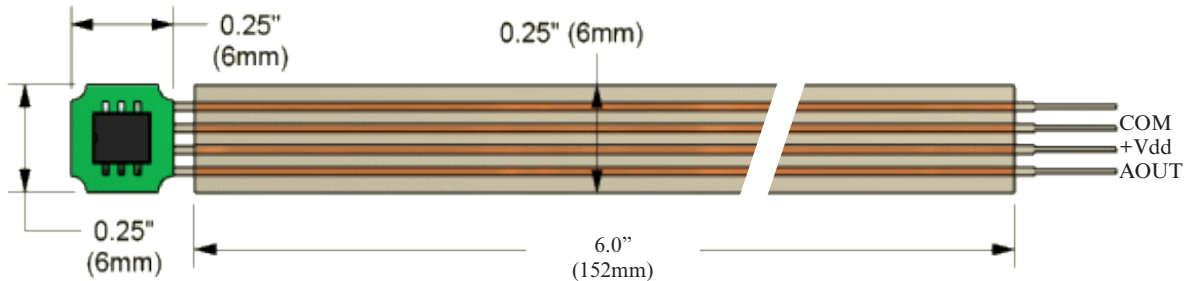
Features

- Non-contact angle sensing. Eliminates wear and enables “through wall sensing” angle sensing
- Senses magnetic field orientation
- Small size 3.6 x 3.0 x 0.8 mm, 6pin SOIC
- Resolution up to 10bits (0.35°)
- Non-linearity 1% at 3V
- Low power- typical 9mA
- Linear ratio-metric analog output voltage proportional to 0 to 360°
- Single supply (2.7 to 5.5V operating)
- Only one external part required - 0.1µF capacitor
- Very high speed >8,000 RPM

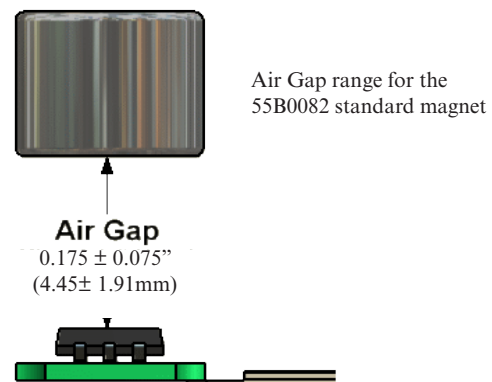
AN_133KIT Components



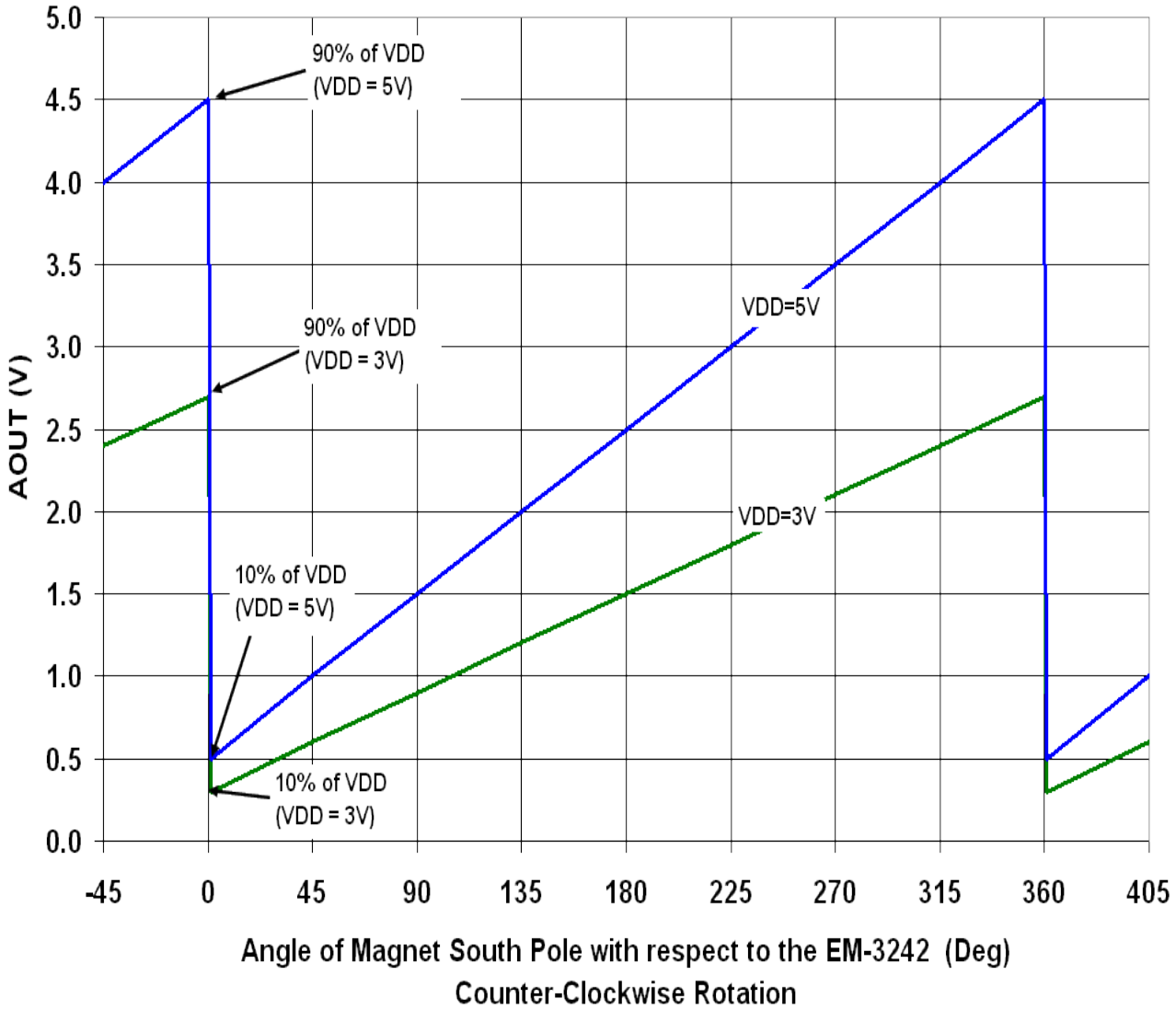
Outline Drawings



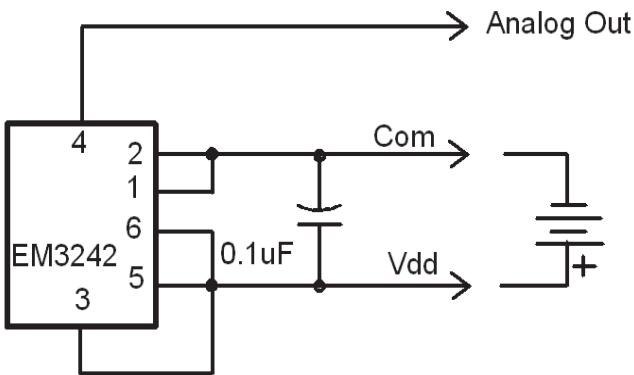
Magnet Field Orientation Through Sensor



EM-3242 Angle Sensor Output vs. Rotation Angle



AN_133KIT Connection Diagram



Revision Date: 15 DEC 2009

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