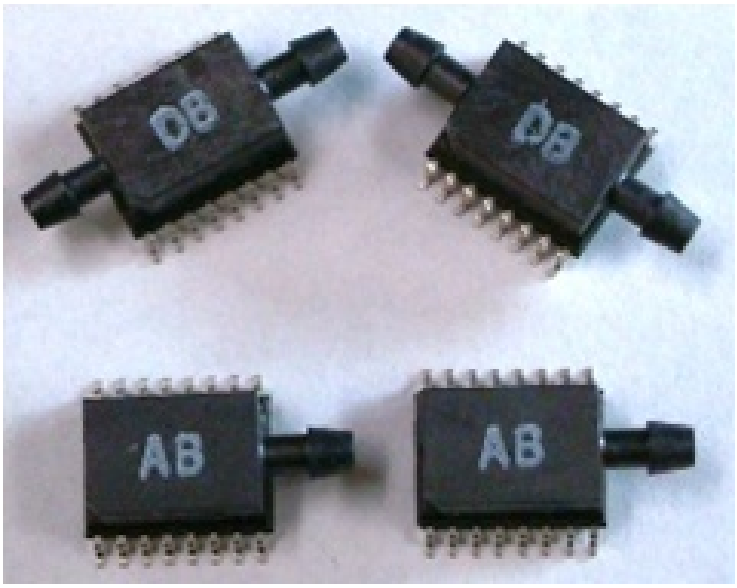
SIGNAL CONDITIONED ULTRA-LOW PRESSURE SENSOR

SILICON MICROSTRUCTURES INCORPORATED
Member of the ELMOS Group

SM5882



HIGHLIGHTS

— Improved Calibration Algorithm
— Improved Calibration Accuracy
— Total Error from ~2% to <1% (with in calibrated temperature range)
— Designed for Humid Conditions (qualification pending)
— Excellent Short and Long Term Stability
— Qualified to Automotive Standards

TYPICAL APPLICATIONS

→ Altimeters
→ Barometric Correction
→ Tire Gauges
→ Digital Pressure Gauges
→ Environmental Monitoring
→ Appliances
→ Consumer and Sports
→ HVAC
→ Medical Instrumentation and Monitoring
→ Pressure Differential and Flow Monitoring
→ Hand-held Gauges

FEATURES

→ Low pressure (0 - 0.6 PSI full scale or 0 - 41 mBar full scale)
→ Easy to Use
→ Compact and Light-weight
→ High-performance, Stable Silicon Chip and Package
→ Easily Embedded in OEM Equipment
→ High-volume, Low Cost
→ Available in Tape and Reel

DESCRIPTION

Silicon Microstructures provides its most popular co-integrated pressure sensor die in a surface mount dual in-line package (SO-16) configuration. This SM5882 series is a fully temperature compensated and signal conditioned high-performance die mounted in an injection-molded package designed for surface mount capability.

The low-pressure SM5882 features both analog and digital output capabilities with an I^2C interface in a single chip design. Silicon Microstructures unique co-integrated low-pressure die incorporates a pressure sensor and ASIC all in one chip which allows for high performance pressure sensing.

This co-integrated packaged sensor die provides a way for OEM manufacturers to incorporate a pressure sensor at a low cost and allows them to reduce the amount of other costly components, without the need to handle, attach, or wire bond silicon sensor die. The result is a versatile product line suitable for a wide range of OEM applications.

The SM5882 model comes in gauge, differential and single ended versions for pressure ranges from 0.6 PSI and 1.5 PSI full scale ranges.

TÜV MANAGEMENT SERVICE ISO / TS 16949

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