INTRODUCING

MS5839 CHLORINE RESISTANT PRESSURE AND TEMPERATURE SENSOR

- Enable ultra-compact design with robust gel-filled construction suitable for harsh media environments
- Offer both pressure and temperature combination sensing with precise 24-bit digital output and I²C Interface



Miniaturization, performance and precision are key for sensors embedded in consumer devices like swim watches and diving equipment. Expanding on TE Connectivity's (TE) portfolio of ultra-compact digital altimeters, our MS5839 2 bar model is designed to meet the next generation of device manufacturer designs and challenges.

TE's MS5839 is an ultra-compact digital altimeter that is optimized for applications where chlorine and saline are present. The robust, gel-filled design of the MS5839 enables operation in harsh media environments while providing accurate and reliable digital measurements. This MEMS (Microelectromechanical Systems) based sensor offers advanced water resistance, chlorine resistance, shielding, low power consumption and digital interconnectivity in an ultra-compact, low profile package. The board level design delivers sensing accuracy for both pressure and temperature measurements.

APPLICATIONS

- Shallow Diving Computers
- Underwater Drones
- Swim Watches
- Fitness Trackers
- Underwater Vehicles
- Diving Equipment
- Diving Computers
- · Shallow Water Drones

KEY BENEFITS

- Enable ultra-compact design with robust gel-filled construction suitable for harsh media environments.
- Facilitate both pressure and temperature combination sensing with precise 24-bit digital output and I²C Interface.
- Offer advanced water resistance, chlorine resistance, digital interconnectivity with low power consumption.
- Ensure high-accuracy and high performance with O-ring and integrated shielding to reduce signal noise and interference.

PERFORMANCE

• Overpressure: 10 bar

Operating Supply Voltage: 1.5V to 3.6V
Operating Temperature: -20°C to +85°C
Operating Pressure Range: 300 to 1200 mbar

• Output Word: 24 bit

Dimensions: 3.3 x 3.3 x 2.75 mm
Long-term Stability: ±2 Mbar/yr

• Low power: 0.6 μ A (standby \leq 0.1 μ A at 25°C)

TARGET MARKETS

Consumer

LEARN MORE

MS5839-02BA Model Detail Page
MS5839-02BA Datasheet
MS5839-02BA Part list
MS5839-02BA Infographic
MS5839-02BA Product Overview Video
Sensors for Corrosive Environments White Paper
Board Mount Pressure Sensors Selection Guide

