

TMR Micropower Magnetic Proximity Sensor (MST Series)

Model: MST Series

Product Overview

Ultra-low power Tunnel Magnetoresistance (TMR) proximity switch sensors with sub-microamp consumption for battery-powered IoT and metering.

Key Features

- State-of-the-art Tunnel Magnetoresistance (TMR) magnetic sensor chip
- Ultra-low power consumption (<1.5 uA) ideal for long-life battery devices
- High magnetic sensitivity: operates with small, low-cost magnets
- High switching frequency capability up to 1 kHz
- Omnipolar or unipolar magnetic field detection

Typical Applications

- Automotive & Commercial Vehicles
- Industrial Machinery & Automation
- Electric Vehicles (EV & FCEV)
- Safety Interlocks & Control Systems

Technical Specifications

Parameter	Specification / Technical Value
Supply Voltage	1.8V to 5.5V DC
Supply Current	< 1.5 uA at 3.0V
Magnetic Sensitivity	Bop = 1.5 mT / Brp = 1.0 mT
Output Type	Push-pull CMOS / Open-drain
Operating Temp	-40°C to +125°C
Packaging	Miniature SOT-23 / Cylindrical barrel IP67