

30V Hall Switch & 30V Automotive Hall Switch

The Hall switch is one of magnetic switches integrating Hall element and control logic for dynamic offset cancellation, low power consumption, and temperature stability of the magnetic thresholds in a single chip. There are many derivative products with different operation mode, magnetic threshold level, and measurement rate.

The **MXM1280** and the **MXM1250** are equipped with several protection functions. It supports for reverse voltage protection, overcurrent protection, under voltage lock out, and HBM 8kV ESD protection. The MXM1250 is qualified with **AEC-Q100 qualification**.



Key Features

- ◆ Package
 - 2.9mm x 1.6mm x 1.2mm SOT
 - 4.0mm x 3.2mm x 1.5mm TO92S
- ◆ Various factory programmable parameters
- ◆ Protection functions
 - Reverse voltage protection: -40V
 - HBM 8KV ESD Protection
 - Over voltage/current protection

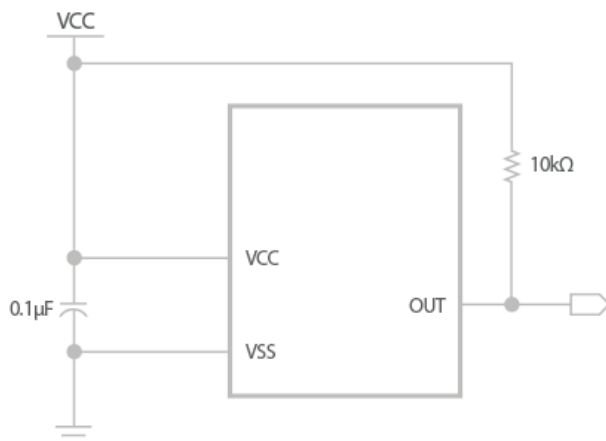
Electrical Characteristics

Operating Voltage	3.8V ~ 30V
Operating Temperature	-40°C ~ 150°C
Current consumption	2.1mA @ 12V
Operating mode	Factory programmable (default: bi-polar latch)
Operating/release point	Factory programmable (default: Bop/Brp ±4.2mT)
Output type	Factory programmable (default: open drain)

Absolute Maximum Range

Supply voltage	-40V ~ 40V
Junction temperature	-40°C ~ 170°C
Output voltage	-0.5V ~ 30V

Application Circuit



Applications

- ◆ BLDC motor
- ◆ Electric power tool
- ◆ Electric bicycle
- ◆ Washing mashine