# MP1013 Series

Hall-effect position sensor with convenient snap-fit mounting.

#### Features

- Solid state reliability
- Excellent output stability over operating temperature range
- Open Collector (NPN) output can be used with bipolar switch or cmos logic circuits with suitable pull up resistor
- MP101301 unipolar switch
  - Output switches low (off) when the magnetic field at the sensor exceeds the operate point threshold.
  - Output switches high (on) when the magnetic field is reduced to below the release point threshold
- RoHS Compliant
- Latching version available on special order basis

## Specifications

### Applications

- Speed sensing
- Door interlock sensing
- Water flow sensing

Part Number	Operating Voltage Range (VDC)	Supply Current (mA max.)	Output	Output Saturation Voltage (mV max.)	Output Current (mA max.)	Operating Temp Range (°C)	Storage Temp Range (°C)	Operate Point Gauss (max.)	Release Point Gauss (min.)	Leads	Reverse Battery Protection
MP101301	3.8 – 24	7.5	3-wire sink	400	25	-40 to 85	-40 to 85	245	60	24 AWG x 150 mm	-30VDC

Notes: These sensors require the use of an external pull-up resistor, the value of which is dependent on the supply voltage. See page 27 for recommendations. Pull-up resistor should be connected between output (Green) and Vcc (Red).

#### Dimensions inches (mm)

All tolerances ±0.005 (0.13) unless otherwise noted.



## Open Collector Sinking Block Diagram



#### Sensor Pocket

