

**Magnetic Sensor ICs**
**Unipolar Detection High Performance Hall-Effect Sensor IC**

**AS1772**
**● General Description**

Using BCD process, the AS1772 is designed for high performance unipolar detection hall-effect application, such as home appliances, rotor position sensing, brushless DC motor etc. The hall IC integrated an on-chip hall voltage generator for magnetic sensing, a comparator that amplifiers the hall voltage, hall sensor with dynamic offset cancellation system, an pull-up resistance, and a Schmitt trigger to provide switching hysteresis for noise rejection, and a voltage regulator for operation with supply voltage of 2.8V to 28V.

AS1772 is designed to respond to **South poles**. While the magnetic flux density (B) is larger than operate point ( $B_{OP}$ ), the output will be turned on (low), the output is held until the magnetic flux density (B) is lower than release point ( $B_{RP}$ ), then turn off (high).

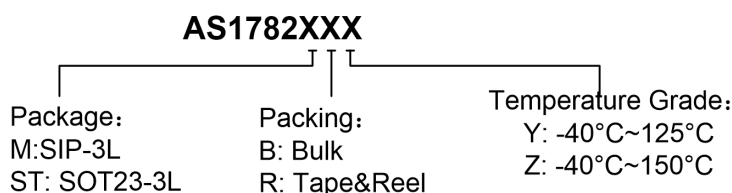
The device is available in SIP-3L and SOT23-3L Package and is rated over the -40°C to 150°C. the package is RoHS compliant.

**● Features**

- High Performance BCD Process Tech.
- Input Voltage Range : 2.8V to 28V
- Resistant to physical stress
- Unipolar Latch Operation
- High Sensitivity Hall Sensor
- High Chopping Frequency
- Magnetic Sensitivity (typical)  
 $B_{OP}=65\text{Gauss}$ ,  $B_{RP}=35\text{Gauss}$
- **Need Pull-up Resistance**
- Reverse Voltage Protection: **-24V**
- Small Solution Size
- RoHS Compliant
- SIP-3L and SOT23-3L Packages
- -40°C to +150 °C Temperature Range

**● Applications**

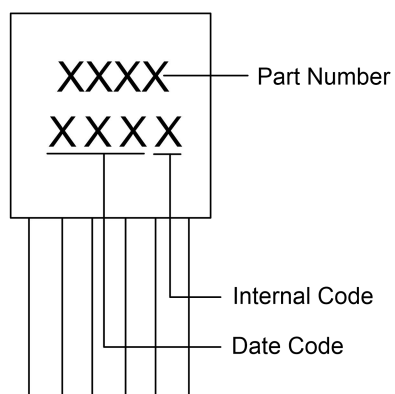
- Electric Tools
- Automotive, Home appliances, Industrial
- Rotor Position Sensing and Flow Meters
- Brushless DC Motor/Fan
- Speed Measurement
- Revolution Counting
- Valve and Solenoid Status
- Proximity Sensing
- Tachometers
- Magnetic Encoder

**■ Ordering Information**


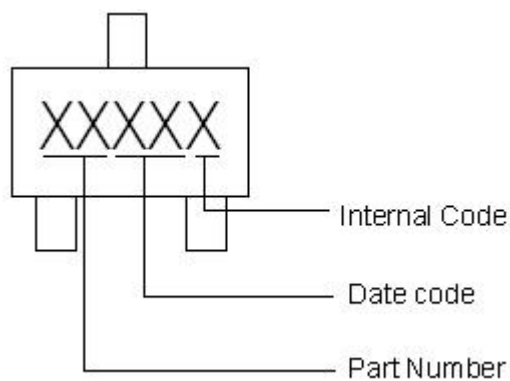
Part Number	$B_{OP}/B_{RP}$ (Gauss)	Package Type	Package Qty	Temperature	Eco Plan
AS1772MBY	65/35	SIP-3L	1K/Package	-40~125°C	RoHS
AS1772STRY	65/35	SOT23-3L	7-in reel 3000pcs/reel	-40~125°C	RoHS
AS1772MBZ	65/35	SIP-3L	1K/Package	-40~150°C	RoHS
AS1772STRZ	65/35	SOT23-3L	7-in reel 3000pcs/reel	-40~150°C	RoHS

## ■ Marking Information

### SIP-3L



### SOT23-3L



## ■ Typical Application Circuit

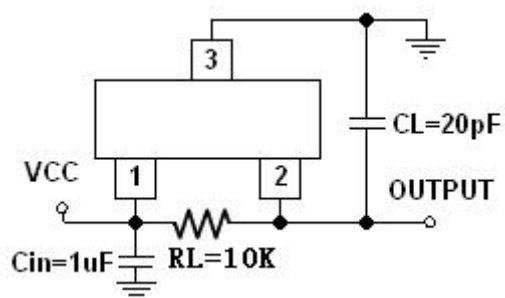
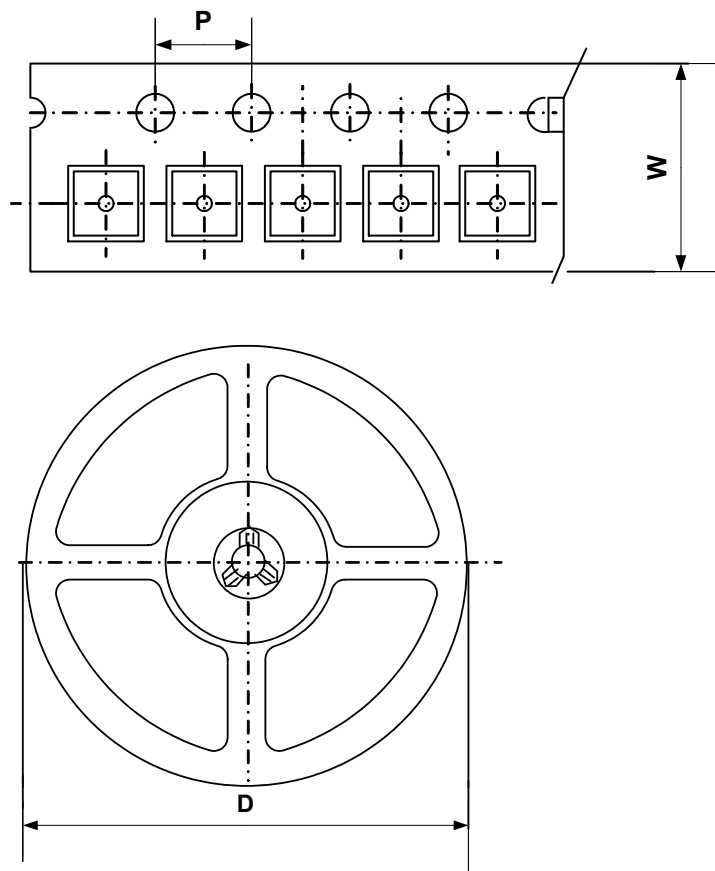


Figure 1, Typical Application Circuit of AS1772

## ■ Packing Information

SOT23-3L



Package Type	Carrier Width (W)	Pitch (P)	Reel Size(D)	Packing Minimum
SOT23-3L	8.0±0.1 mm	4.0±0.1 mm	180±1 mm	3000pcs

Note: Carrier Tape Dimension, Reel Size and Packing Minimum

## ■ Packing Information

1. Packing type: Bulk
2. Packing minimum: 1000pcs