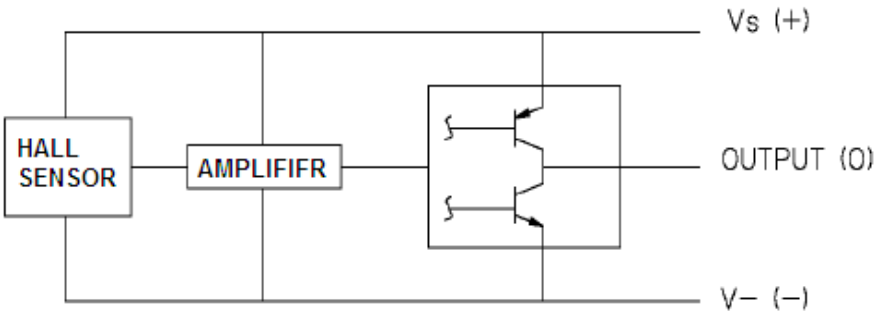
## Features

- Small size
- High accuracy
- Good stability
- High sensitivity
- High Reliability
- Low noise
- Low-Power

## Applications

- Electric car handle
- Current detection sensor
- Ferrous metal detector
- Motion detector
- Gear Tooth Speedometer
- Motor control
- Rotary encoder

## Functional Block Diagram



## Absolute Maximum Ratings

| Parameter | Symbol | Value | Units |
|---|---|---|---|
| Supply Voltage(operating) | VCC | 10.5 | V |
| Output Current | IOUT | 2 | mA |
| Operating Temperature Range | TA | -40 to 150 | ℃ |
| Storage Temperature Range | TS | -65 to 150 | ℃ |

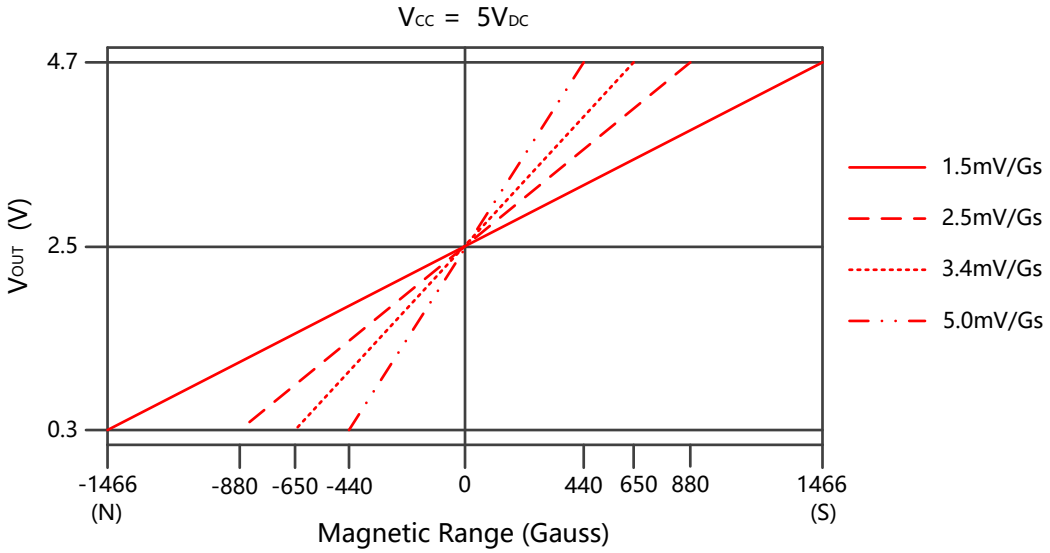
## General Electrical Specifications

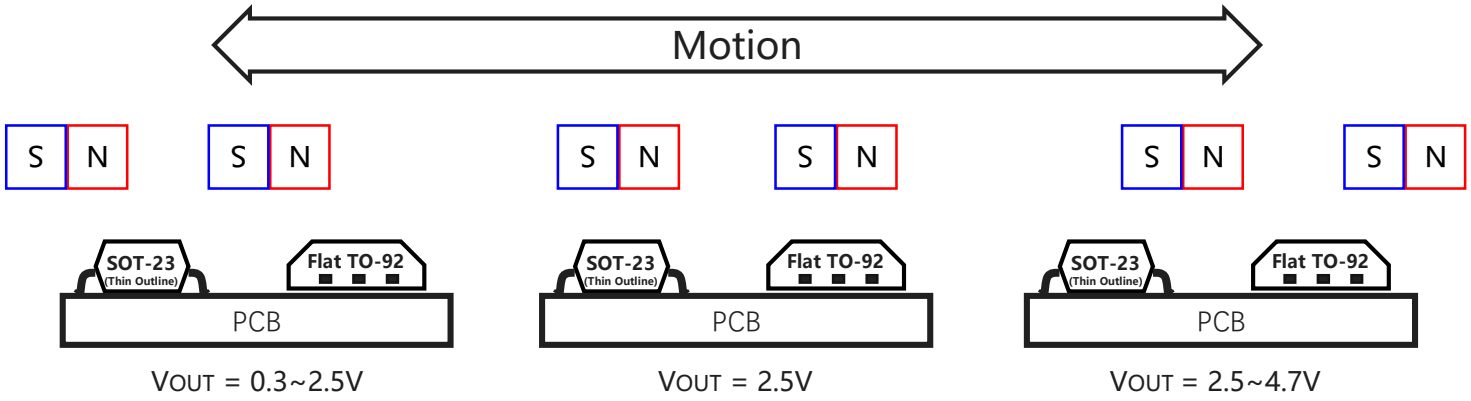
DC Operating Parameters TA= 25℃, VCC= 5V (unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Units |
|---|---|---|---|---|---|---|
| Operating Voltage | VCC | Operating | 4.5 | 5.0 | 10.5 | V |
| Supply Current | ICC | Average | | 5 | 8 | mA |
| Output Current | IOUT | | | 1.0 | 1.5 | mA |
| Response Time | TACK | | | 3 | | μS |
| Quiescent Output Voltage | VO | B = 0Gs | 2.35 | 2.5 | 2.65 | V |
| Min Output Voltage | | B = -450Gs | | | 0.2 | V |
| Max Output Voltage | | B = 450Gs | 4.8 | | | V |

## Magnetic Characteristics

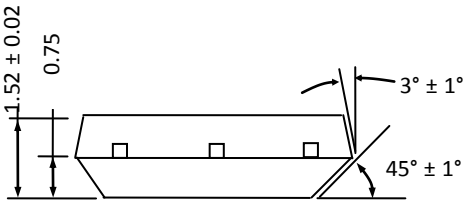
| Parameter | Test Conditions | Min | Typ | Max | Units |
|---|---|---|---|---|---|
| Sensitivity | TA = 25℃ | 4.95 | 5.0 | 5.05 | mV/Gs |
| Magnetic Field | | | ±500 | | Gs |
| Linearity（% of Span) | | | -1.0 | | |
| Temperature Error （Null Drift） | | - 0.10 | | 0.10 | %/℃ |
| Sensitivity Drift | TA ≥ 25℃ | - 0.15 | | 0.05 | %/℃ |
| | TA ＜ 25℃ | - 0.04 | | 0.185 | |

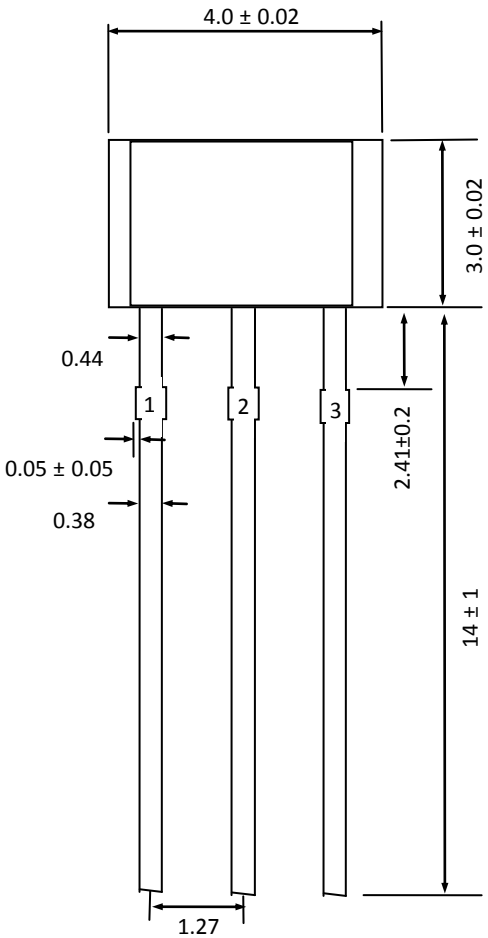

VCC = 5VDC
4.7
2.5
0.3
VOUT (V)
-1466
(N)
-880
-650
-440
0
440
650
880
1466
(S)
Magnetic Range (Gauss)
1.5mV/Gs
2.5mV/Gs
3.4mV/Gs
5.0mV/Gs

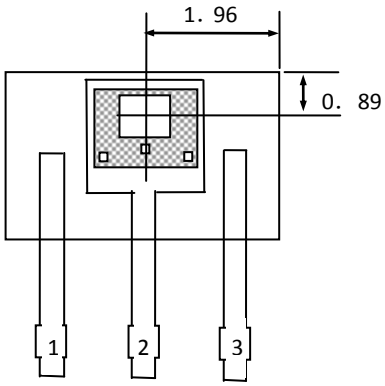

Motion
S
N
SOT-23
(Thin Outline)
Flat TO-92
PCB
VOUT = 0.3~2.5V
VOUT = 2.5V
VOUT = 2.5~4.7V

## Package Information

**Package UA, 3-Pin TO-92:**

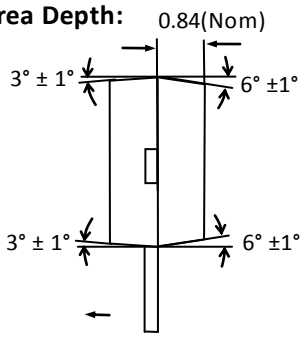



**Sensor Location**

**Active Area Depth:**




**Notes:**

1). Controlling dimension: mm

2). Leads must be free of flash and plating voids

3). Do not bend leads within 1 mm of lead to package interface

4). PINOUT: Pin 1 $V_{DD}$

Pin 2 GND

Pin 3 Output

## Ordering Information

| Part No. | Package Code |
|---|---|
| ME1494 | UA (TO-92) |