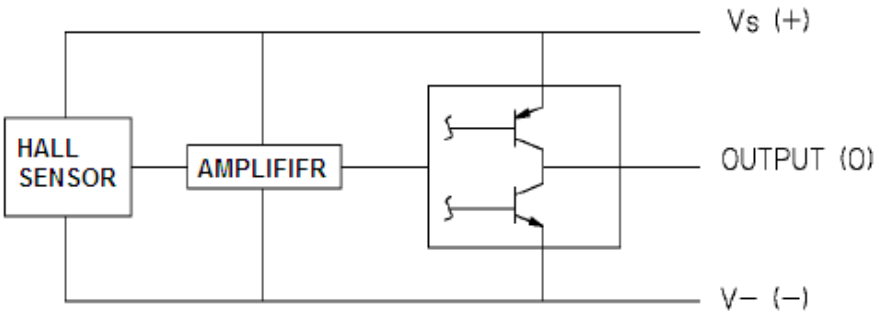
Features

- 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	℃

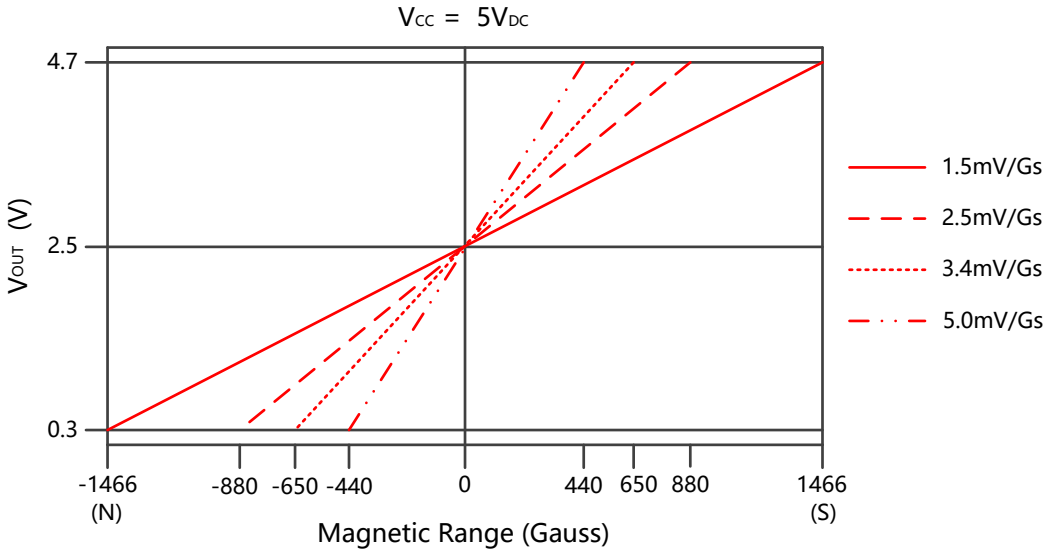
General Electrical Specifications

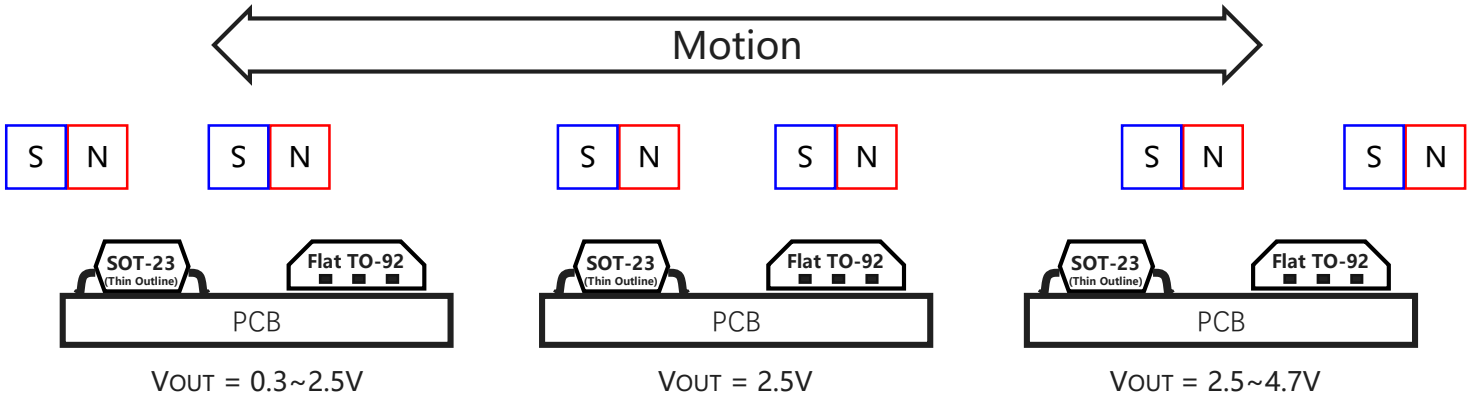
DC Operating Parameters TA= 25℃, VCC= 5V (unless otherwise specified)

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 = -1000Gs			0.2	V
Max Output Voltage		B = 1000Gs	4.8			V

Magnetic Characteristics

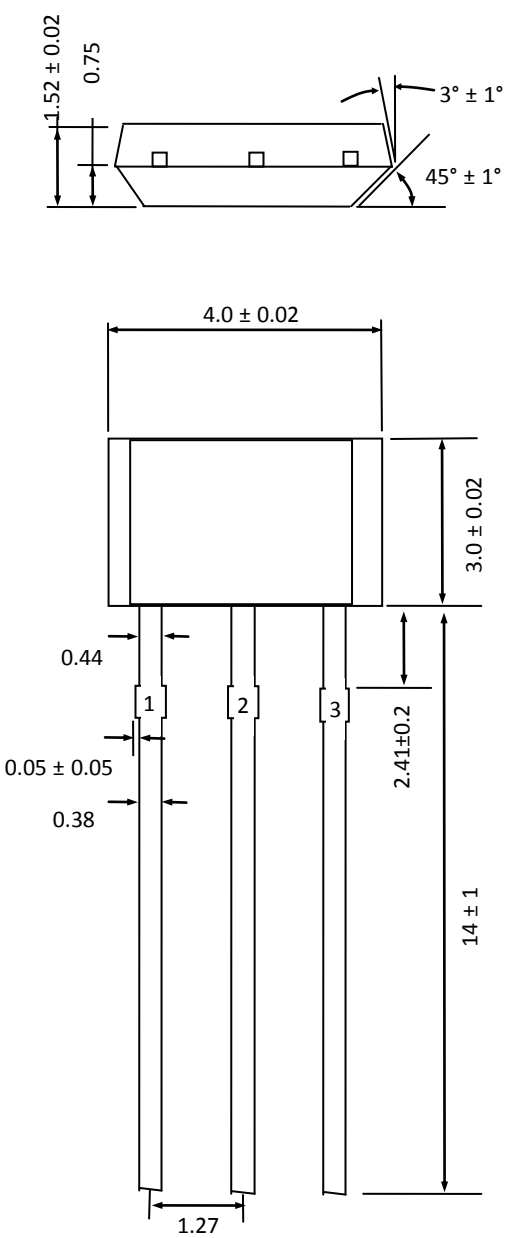
Parameter	Test Conditions	Min	Typ	Max	Units
Sensitivity	TA = 25℃	2.25	2.5	2.75	mV/Gs
Magnetic Field		±800	±1000		Gs
Linearity（% of Span)			-1.0		
Temperature Error （Null Drift）		- 0.10		0.10	%/℃
Sensitivity Drift	TA ≥ 25℃	- 0.15		0.05	%/℃
	TA ＜ 25℃	- 0.04		0.185	

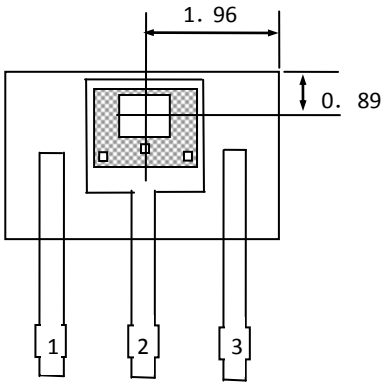

Vcc = 5VDC
4.7
2.5
0.3
VOUT (V)
-1466
(N)
-880
-650
-440
0
440
650
880
1466
(S)
Magnetic Range (Gauss)
1.5mV/Gs
2.5mV/Gs
3.4mV/Gs
5.0mV/Gs


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

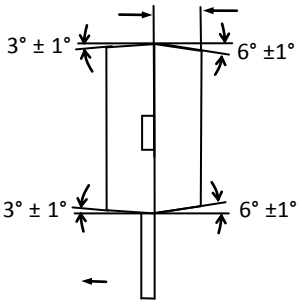
Package UA, 3-Pin TO-92:





Sensor Location

Active Area Depth: 0.84(Nom)



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
ME1496	UA (TO-92)