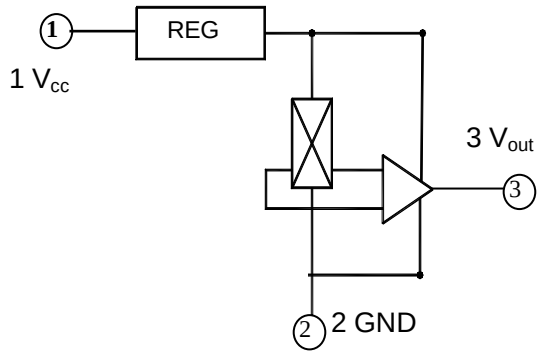
Features

- High pressure resistance
- 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	8	V
Output Current	IOUT	20	mA
Operating Temperature Range	TA	-50 to 100	℃
Storage Temperature Range	TS	-65 to 150	℃

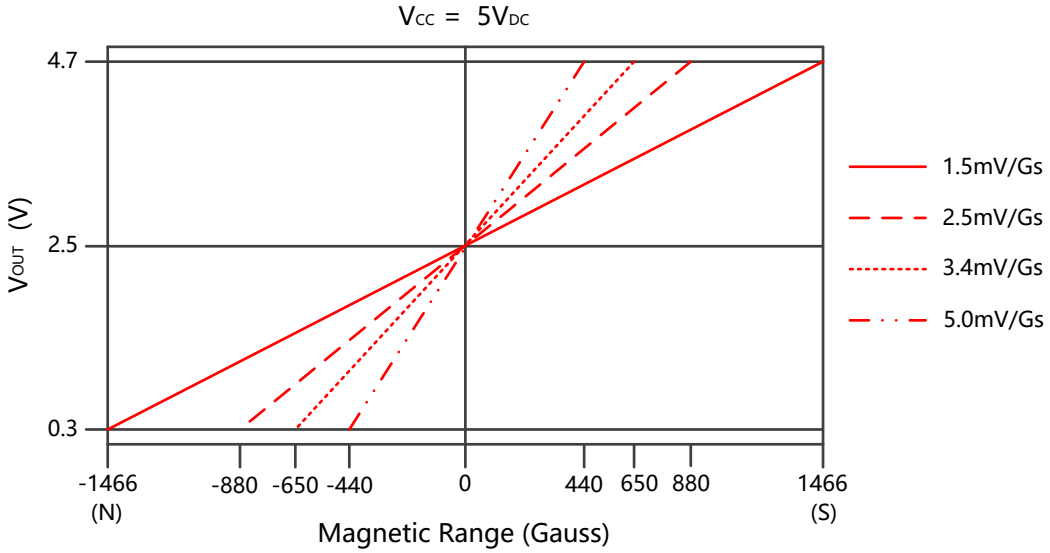
General Electrical Specifications

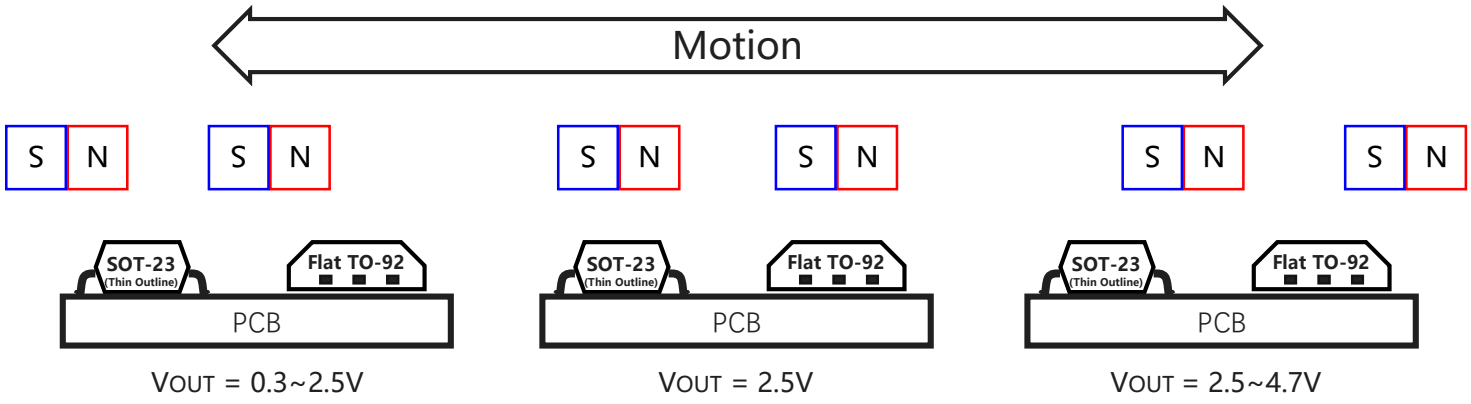
DC Operating Parameters TA= 25℃, VCC= 5V (unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Operating Voltage	V_{CC}	Operating	3.5		6.5	V
Supply Current	I_{CC}	Average	7	8	10	mA
Output Resistance	R_O			40	100	Ω
Noise	V_{NO}	BW=10Hz-10KHz		90		μV
Quiescent Output Voltage	V_O	B = 0Gs	2.35	2.5	2.65	V
Min Output Voltage		B = -1200Gs	0.8		0.95	V
Max Output Voltage		B = 1200Gs	4.2			V

Magnetic Characteristics

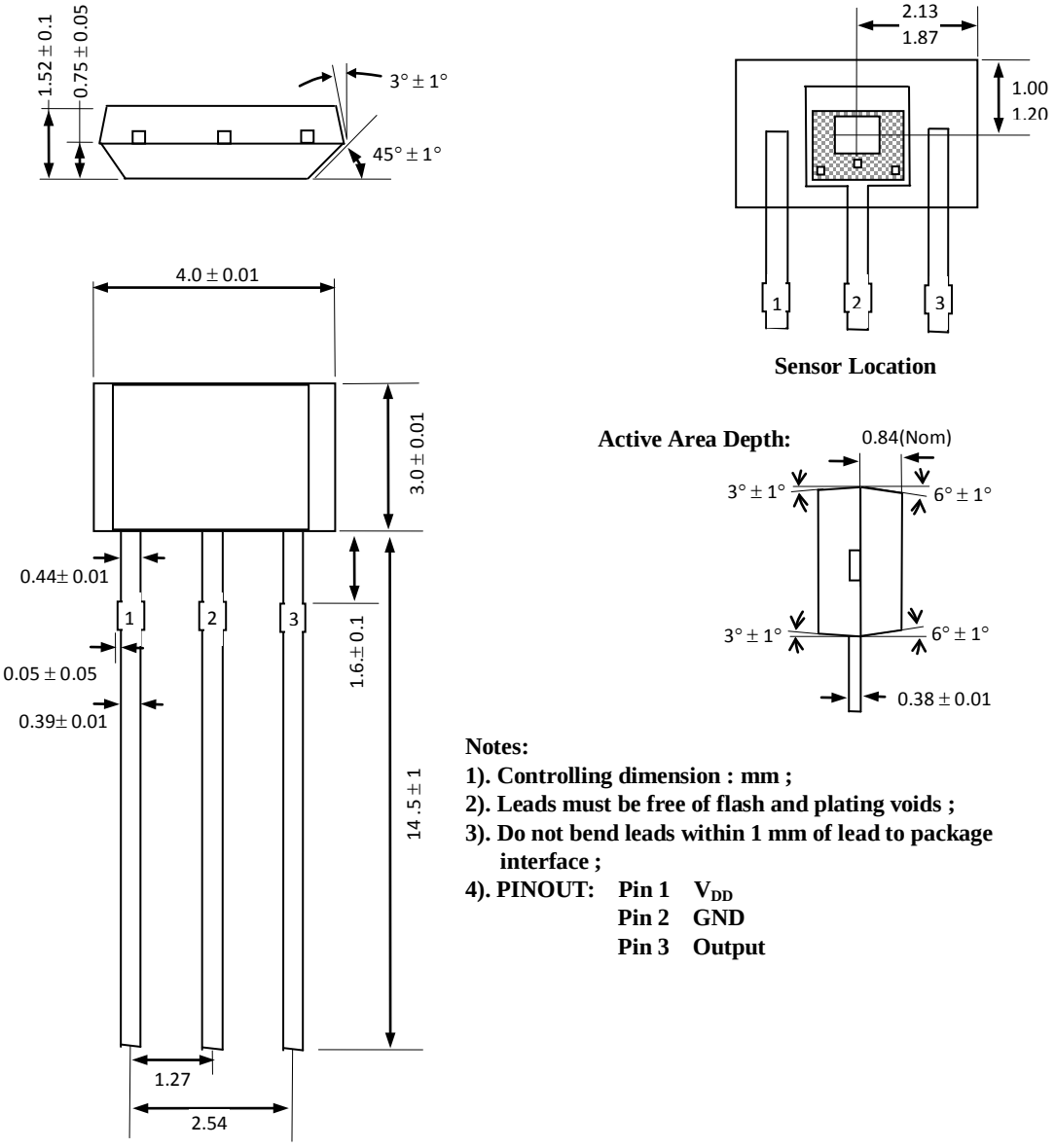
Parameter	Test Conditions	Min	Typ	Max	Units
Sensitivity	TA = 25℃	1.5	2.0	2.5	mV/Gs
Magnetic Field		±650	±1000		Gs
Linearity（% of Span)			0.007		
Temperature Error （Null Drift）		- 0.10		0.10	%/℃
Sensitivity Drift	TA ≥ 25℃	- 0.15		0.05	%/℃
	TA ＜ 25℃	- 0.04		0.185	


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 SIP:



Notes:

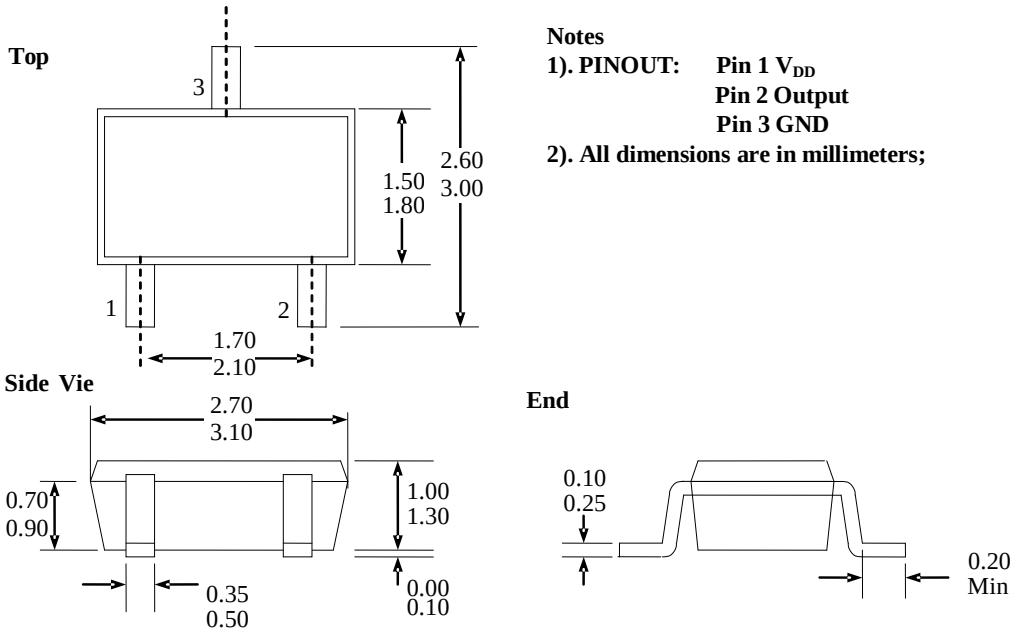
1). Controlling dimension : mm ;

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**

Package SO, 3-Pin SOT-23:

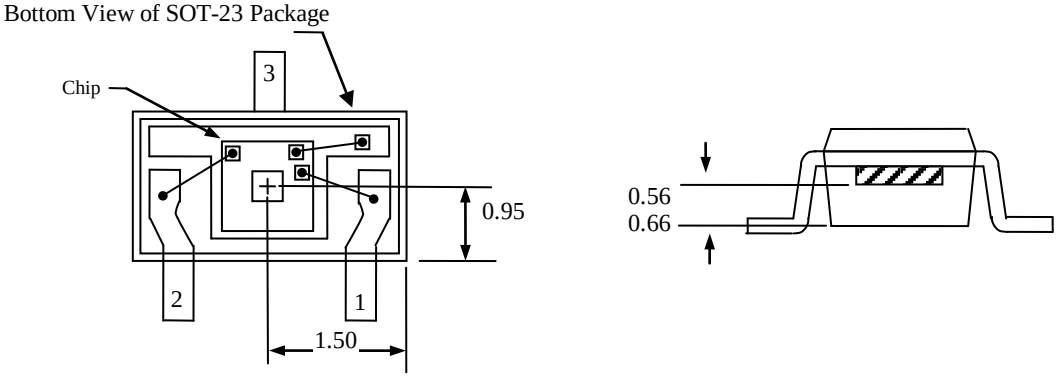


Notes

1). PINOUT: **Pin 1 V_{DD}**
Pin 2 Output
Pin 3 GND

2). All dimensions are in millimeters;

Hall plate location



Ordering Information

Part No.	Package Code
ME149E	UA (TO-92)
	SO (SOT-23)