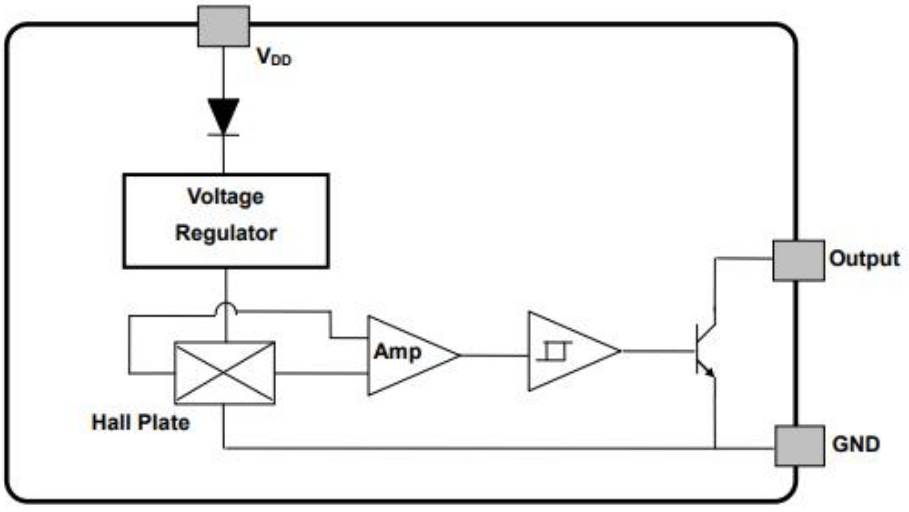
Features

- 3.5V to 24V Operation
- -40℃ to 150℃ Superior temperature operation
- CMOS technology
- Low current consumption
- Chopper-stabilized amplifier stage
- Open drain output
- Low sensitivity
- Small Size-SOT23 3L or SIP 3L
- both RoHS compliant packages

Applications

- Automotive, Consumer and Industrial
- Solid-state switch
- Brushless DC motor commutation
- Speed detection
- Angular position detection
- Proximity detection
- Current detector

Functional Block Diagram



Absolute Maximum Ratings

Parameter	Symbol	Value	Units
Supply Voltage	V_{DD}	28	V
Supply Current	I_{DD}	50	mA
Output Voltage	V_{OUT}	28	V
Output Current	I_{OUT}	50	mA
Storage Temperature Range	TS	-65 to 170	℃

General Electrical Specifications

DC Operating Parameters TA= 25℃, VDD= 3.5V to 24V (unless otherwise specified)

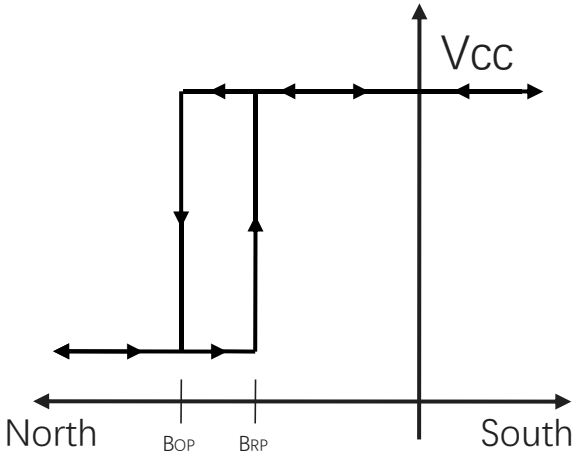
Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Supply Voltage	V_{DD}	Operating	3.5		24	V
Supply Current	I_{DD}	B < BRP	1.5	2.5	5	mA
Output Saturation Voltage	$V_{DS(on)}$	IOUT = 20mA, B > BOP		0.4	0.5	V
Output Leakage Current	I_{OFF}	B < BRP VOUT = 24V		1.0	10	μA
Output Rise Time	T_R	RL = 1KΩ, CL = 20pF		0.25		μs
Output Fall Time	T_F	RL =1KΩ, CL = 20pF		0.25		μs

Magnetic Characteristics

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Operating Point	B_{OP}	Ta=25℃,Vdd=12V DC	100	120	150	G
Release Point	B_{RP}		50	90	130	G
Hysteresis	B_{HYS}		20	30	50	G

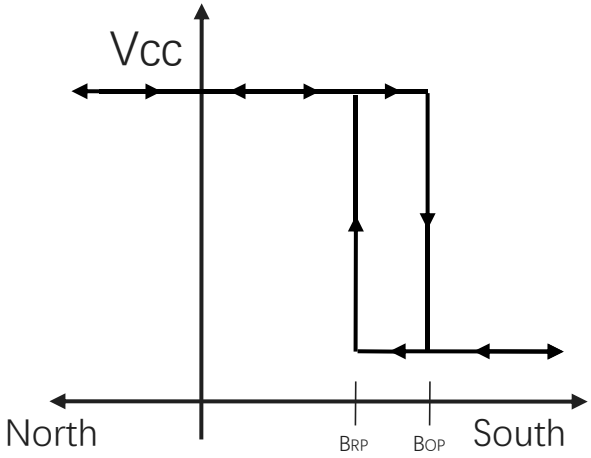
Switching Function Uni-polar (North)

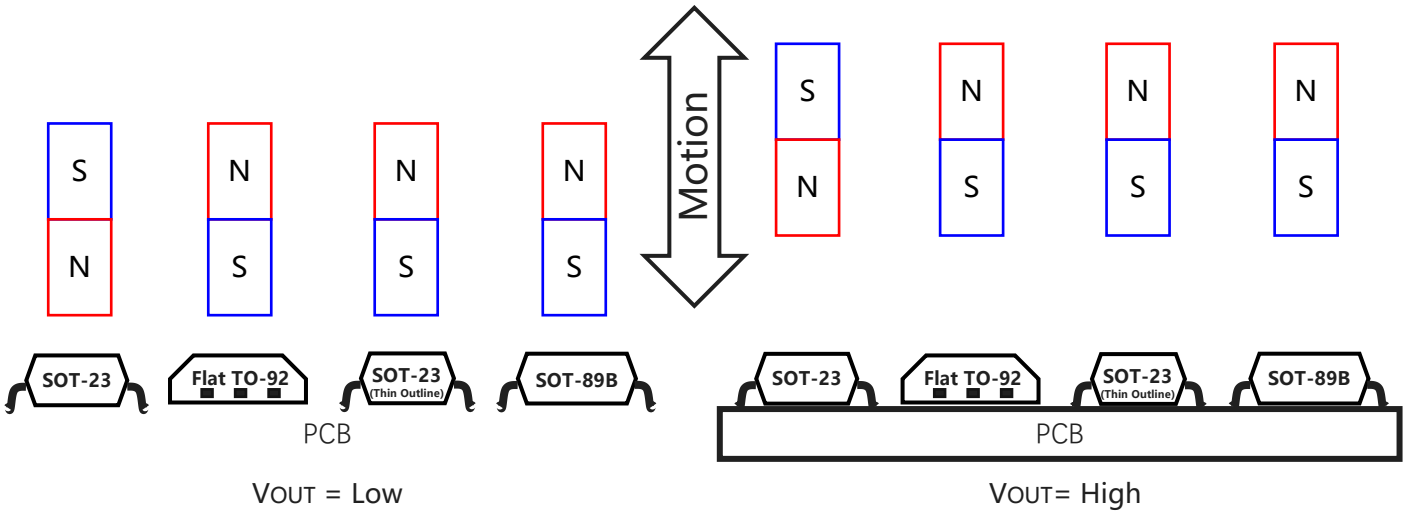
SOT-23



Switching Function Uni-polar (South)

SOT-23 (Thin Outline) / Flat TO-92 / SOT-89B



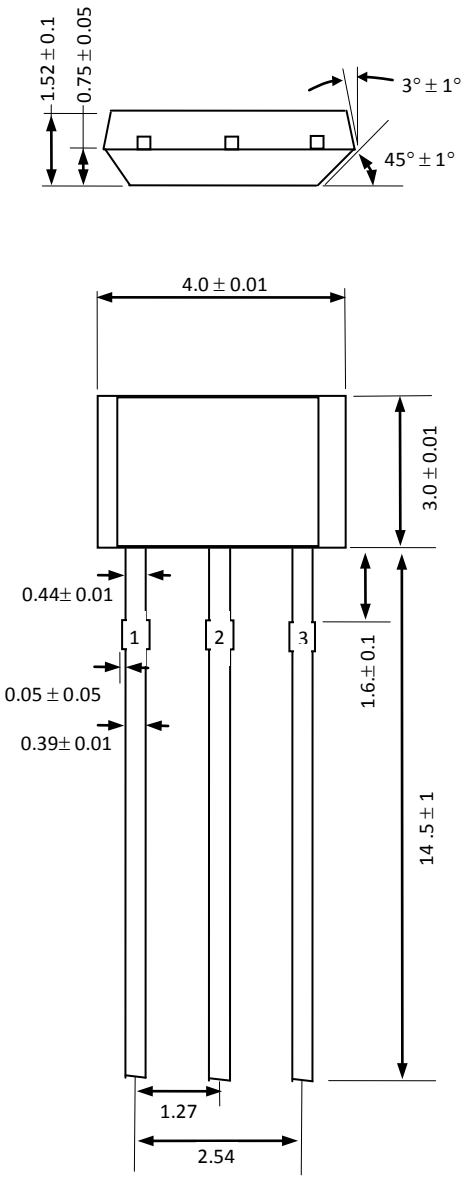


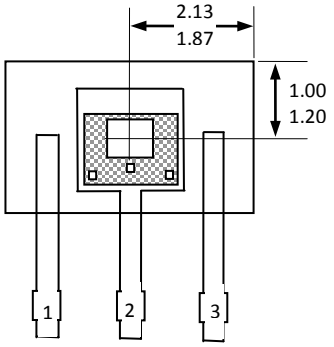
VOUT = Low

VOUT= High

Package Information

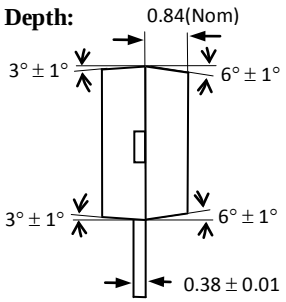
Package UA, 3-Pin SIP:





Sensor Location

Active Area Depth:



Notes:

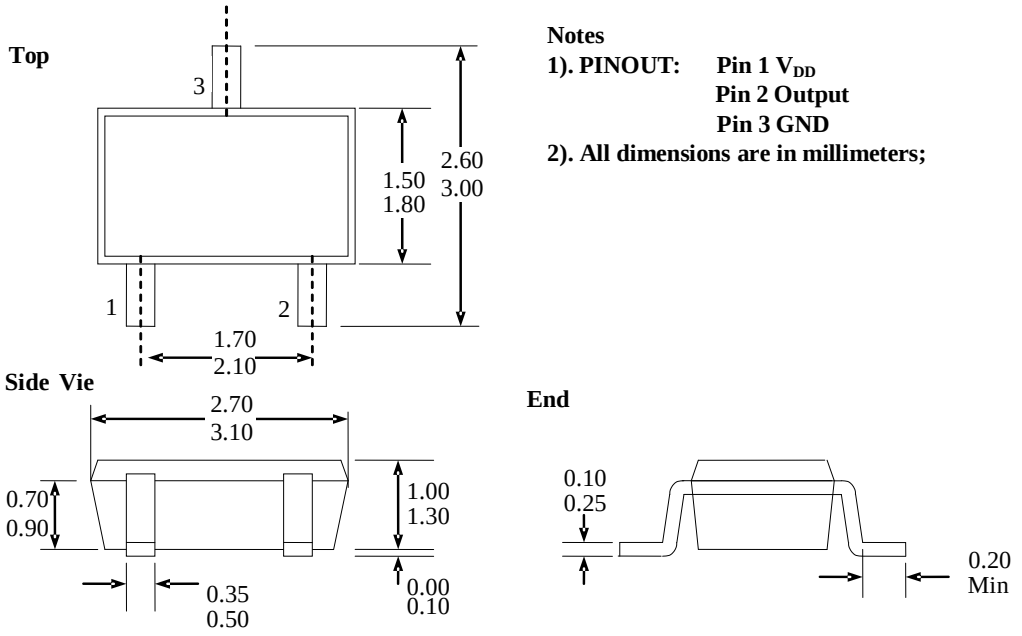
1). Controlling dimension : mm ;

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**

Package SO, 3-Pin SOT-23:

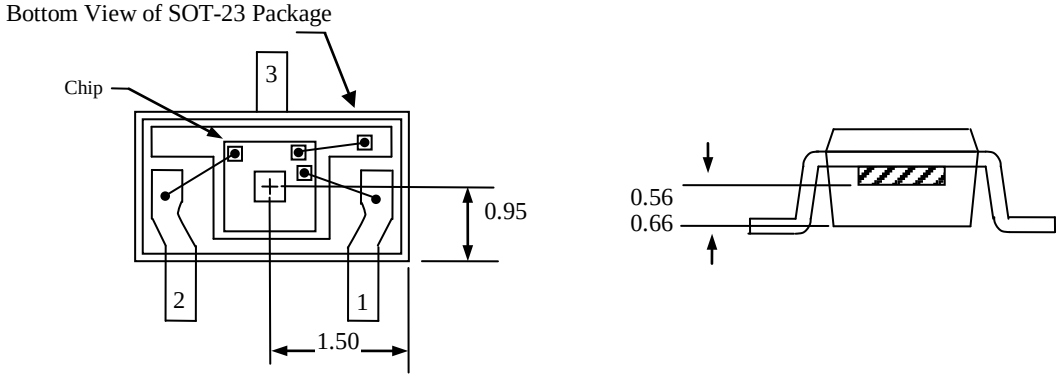


Notes

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
ME1582	UA (TO-92)
	SO (SOT-23)