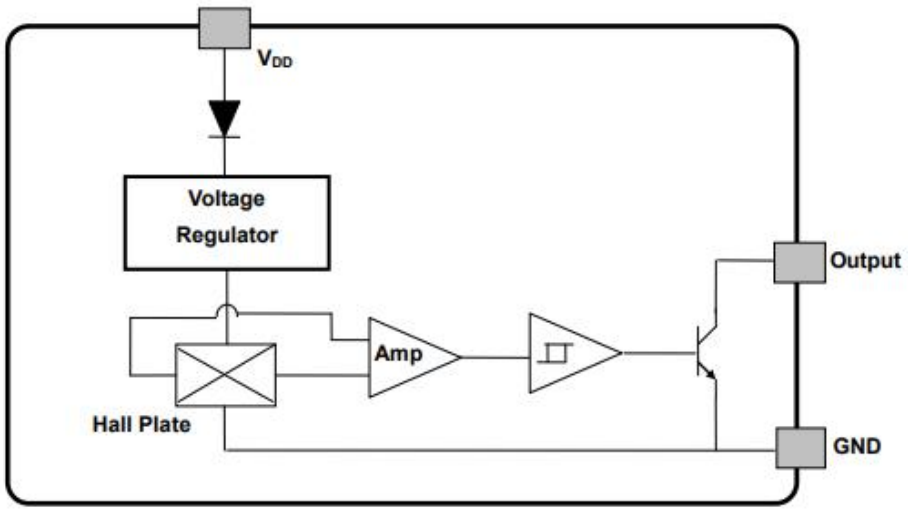
Features

- 4.5V to 24V Operation
- -40℃ to 150℃ Superior temperature operation
- Bipolar technology
- Open-collector 50 mA output
- Reverse battery protection
- Solid-state reliability
- Resistant to physical stress
- Activate with small, commercially available
  Permanent magnets

Applications

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

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= 4.5V to 24V (unless otherwise specified)

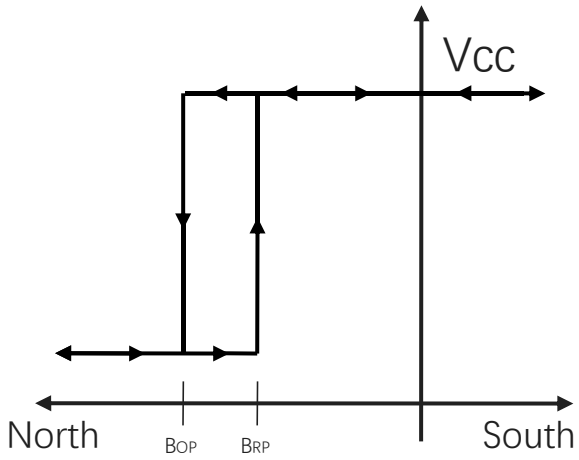
Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Supply Voltage	V_{DD}	Operating	4.5		24	V
Supply Current	I_{DD}	B < BRP		5	10	mA
Output Saturation Voltage	$V_{DS(on)}$	IOUT = 20mA, B > BOP		0.15	0.5	V
Output Leakage Current	I_{OFF}	B < BRP VOUT = 24V		0.1	10	μA
Output Rise Time	TR	RL = 820Ω, CL = 20pF		0.04	1.5	μs
Output Fall Time	TF	RL =820Ω, CL = 20pF		0.18	1.0	μs

Magnetic Characteristics

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Operating Point	B_{OP}	Ta=25℃,Vdd=12V DC	80		180	G
Release Point	B_{RP}		20		150	G
Hysteresis	B_{HYS}			50		G

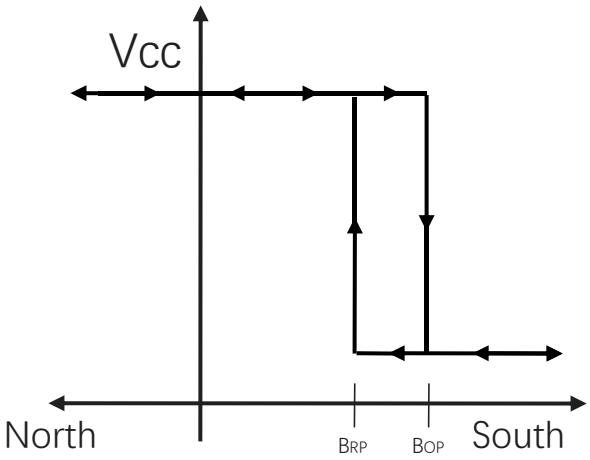
Switching Function Uni-polar (North)

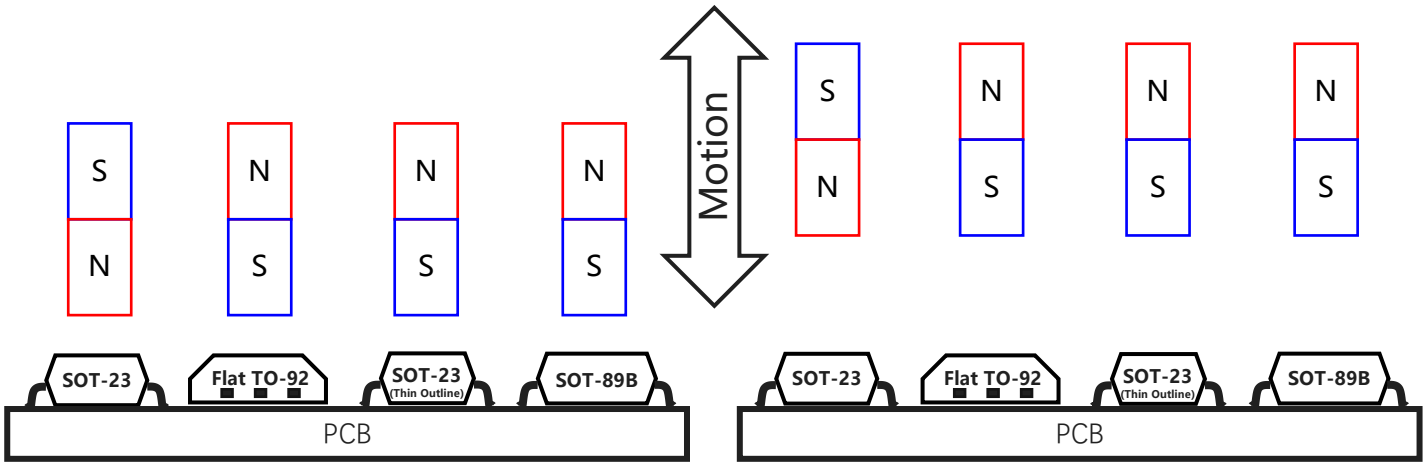
SOT-23



Switching Function Uni-polar (South)

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



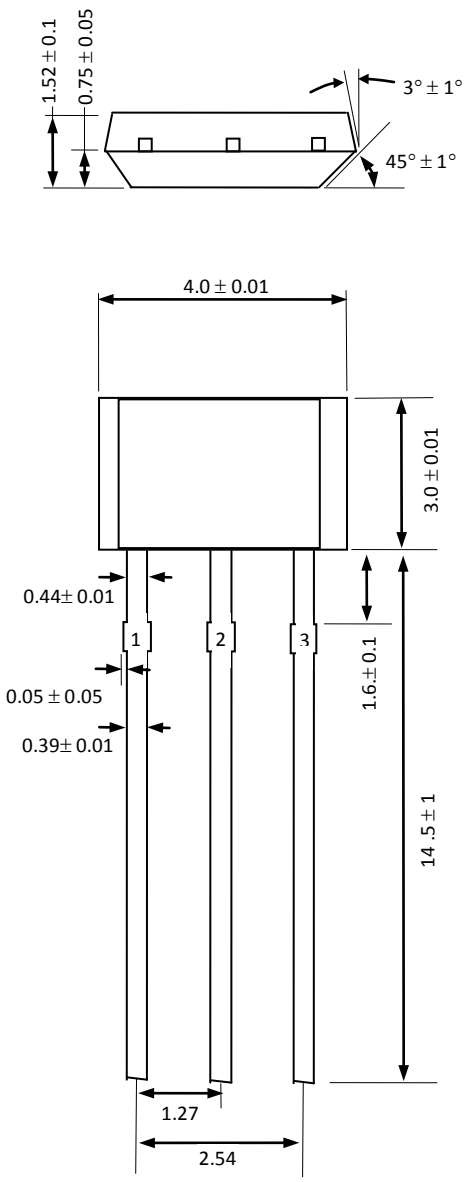


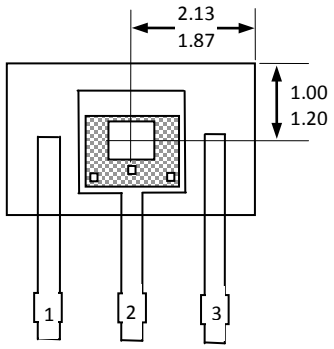
VOUT = Low

VOUT= High

Package Information

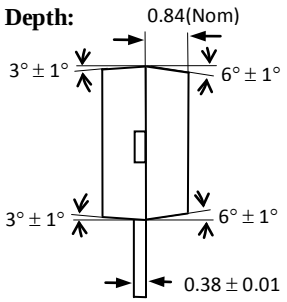
Package UA, 3-Pin SIP:





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**

Ordering Information

Part No.	Package Code
ME1443	UA (TO-92)