

EW-450B

Shipped in packet-tape reel(5000pcs/Reel)

EW-450B is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

Unipolar Hall
Effect Switch

Supply Voltage
3~26.4V

Hall Element
Continuous
Excitation

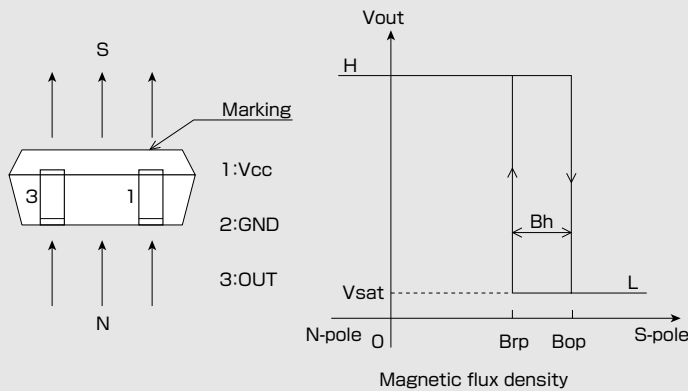
Standard Sensitivity
Bop:6mT

Output
Open Collector

SMT

Notice:It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

●Operational Characteristics

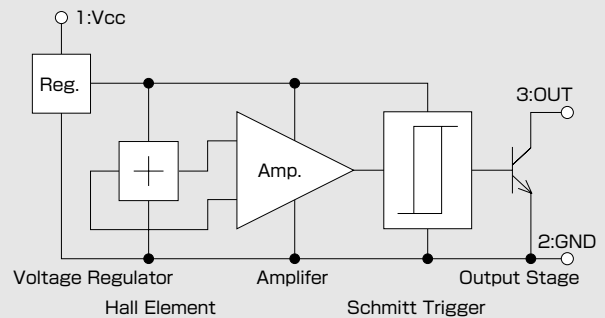


●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	V_{CC}	26.4(*)	V
Output H Voltage	$V_{O(off)}$	V_{CC}	V
Output L Current	I_{sink}	10	mA
Operating Temperature Range	T_{opr}	-40 ~ 115	°C
Storage Temperature Range	T_{stg}	-40 ~ 125	°C

(*) Please refer to Supply Voltage Derating Curve.

●Functional Block Diagram



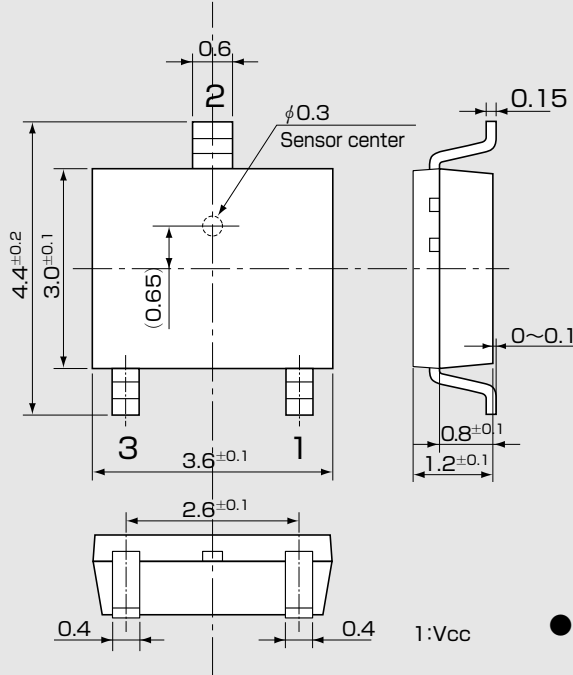
●Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	V_{CC}		3	12	26.4	V
Operating Point	B_{OP}	$V_{CC}=12V$	3	6	10	mT
Release Point	B_{rp}	$V_{CC}=12V$	2.5	5	9.5	mT
Hysteresis	B_h	$V_{CC}=12V$	0.5	1.1	2.5	mT
Output Saturation Voltage	V_{sat}	$V_{CC}=12V, OUT="L", I_{sink}=10mA$			0.4	V
Output Leakage Current	I_{leak}	$V_{CC}=12V, OUT="H", V_{out}=12V$			1	μA
Supply Current	I_{CC}	$V_{CC}=12V, OUT="H"$		5	6	mA

1 [mT] = 10 [Gauss]

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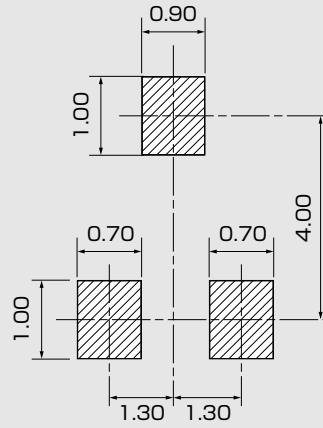
●Package (Unit:mm)



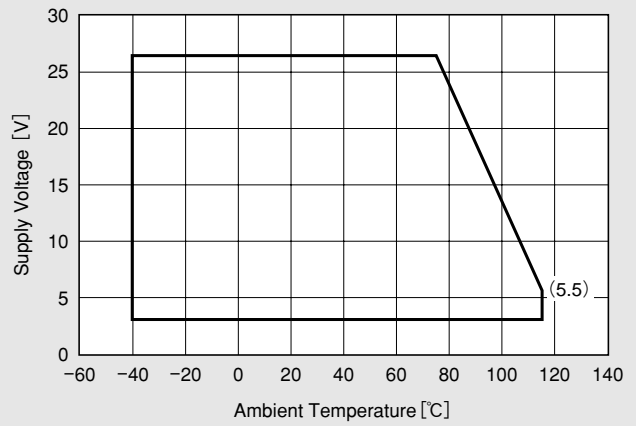
Note) The sensor center is located within the φ0.3mm circle.

- 1:VCC
- 2:GND
- 3:OUT

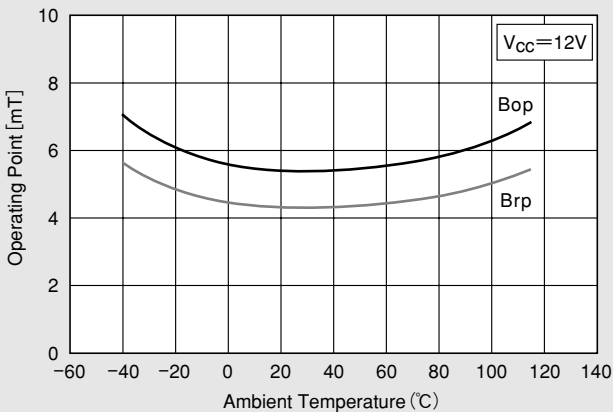
●(For reference only)Land Pattern (Unit:mm)



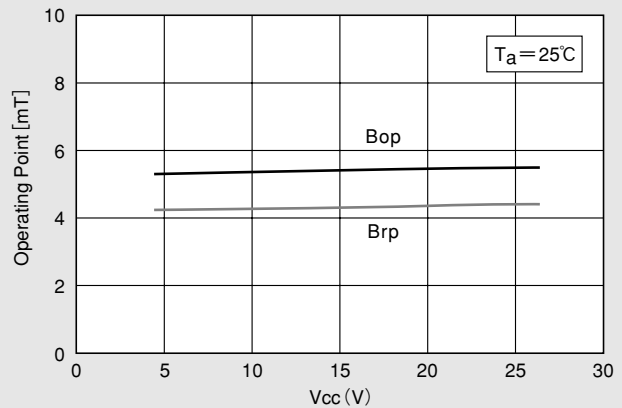
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



a
e
h
p
q
r

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June 2, 2010