

# EW-410B

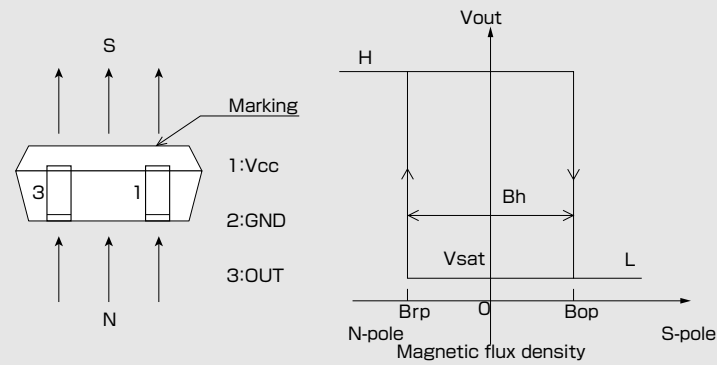
Shipped in packet-tape reel(5000pcs/Reel)

EW-410B is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

Bipolar Hall Effect Latch	Supply Voltage 3~26.4V	Hall Element Continuous Excitation	High Sensitivity Bop:3mT	Output Open Collector	SMT
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Notice:It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

### Operational Characteristics

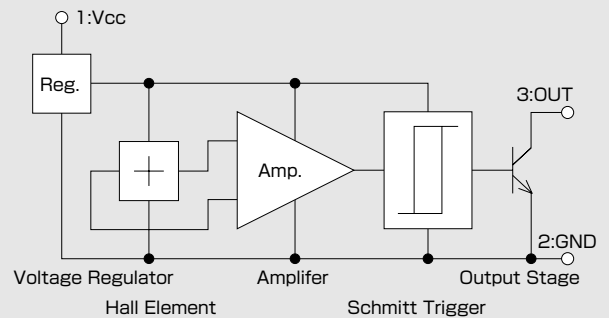


### Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	$V_{CC}$	26.4 <sup>(*)</sup>	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



Another product type with pulled-up resistor (EW-412B). Please contact AKM to obtain the detail information.

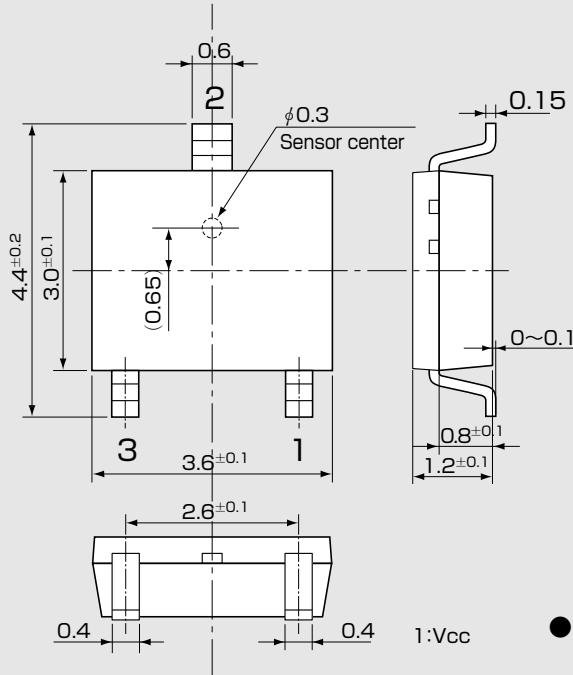
### Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	$V_{CC}$		3	12	26.4	V
Operating Point	$B_{OP}$	$V_{CC}=12V$	1	3	6	mT
Release Point	$B_{rp}$	$V_{CC}=12V$	-6	-3	-1	mT
Hysteresis	$B_h$	$V_{CC}=12V$	2	6		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	$\mu A$
Supply Current	$I_{CC}$	$V_{CC}=12V, OUT"H"$		5	6	mA

1 [mT] = 10 [Gauss]

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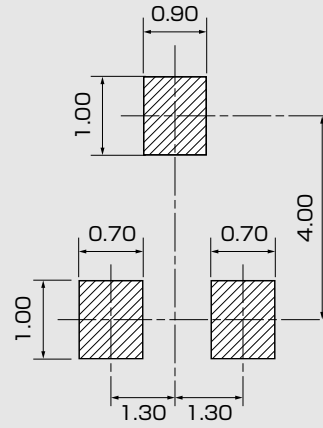
●Package (Unit:mm)



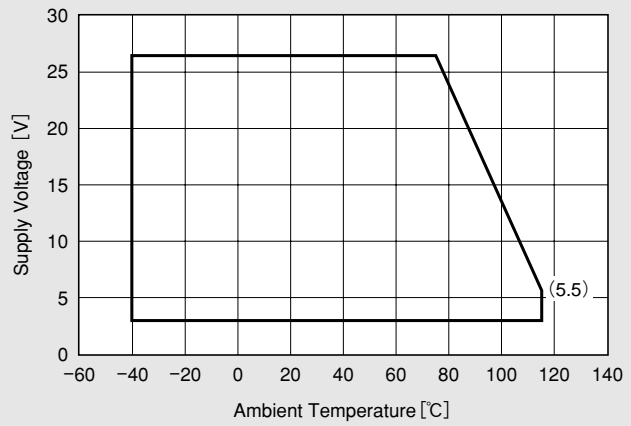
Note) The sensor center is located within the  $\phi 0.3$ mm circle.

- 1:Vcc
- 2:GND
- 3:OUT

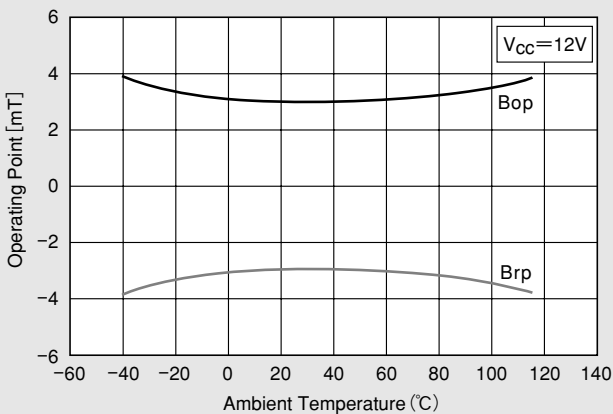
●(For reference only)Land Pattern (Unit:mm)



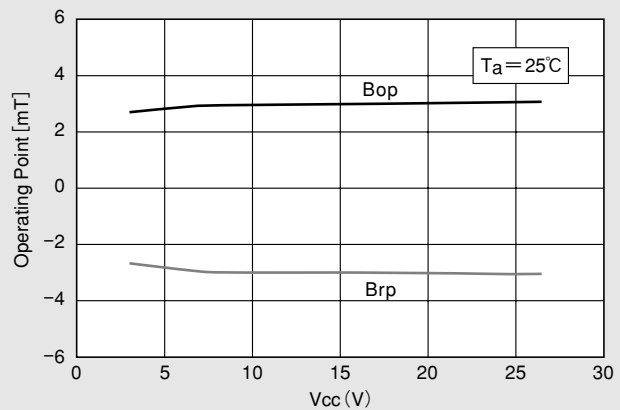
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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April 4, 2012