

# EW-450B

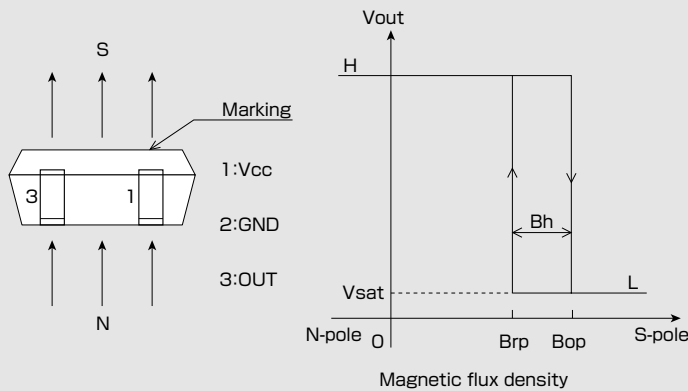
Shipped in packet-tape reel(5000pcs/Reel)

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
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## ●Operational Characteristics

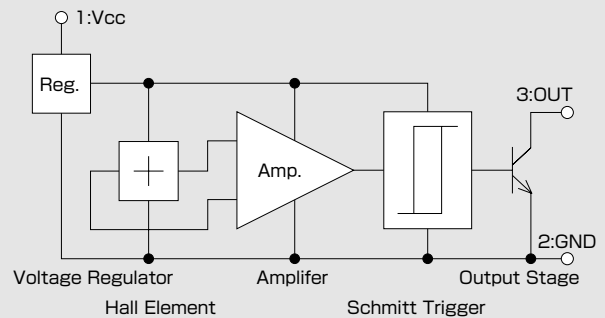


## ●Absolute Maximum Ratings (Ta=25°C)

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



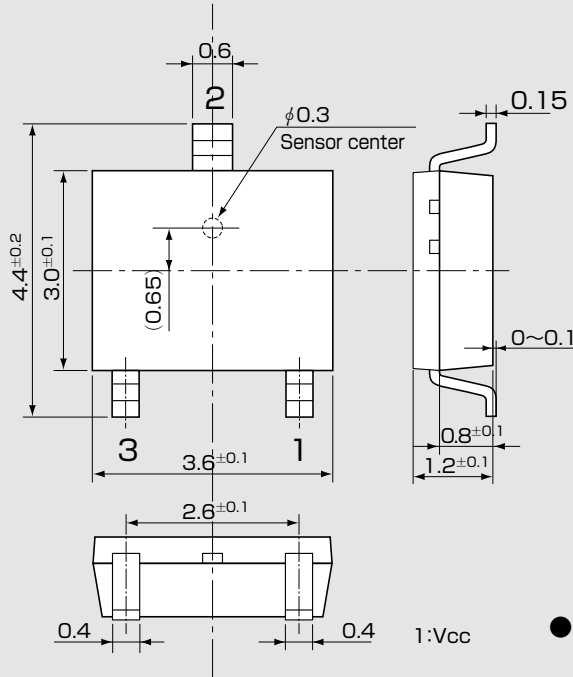
## ●Magnetic and Electrical Characteristics (Ta=25°C)

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	$\mu A$
Supply Current	$I_{CC}$	$V_{CC}=12V, OUT="H"$		5	6	mA

1 [mT]=10 [Gauss]

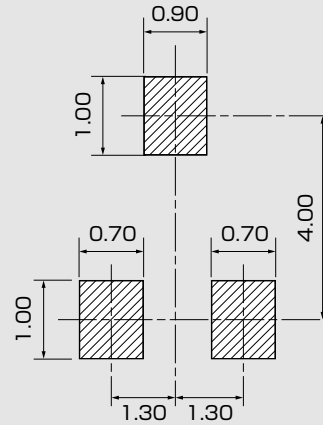
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●Package (Unit:mm)

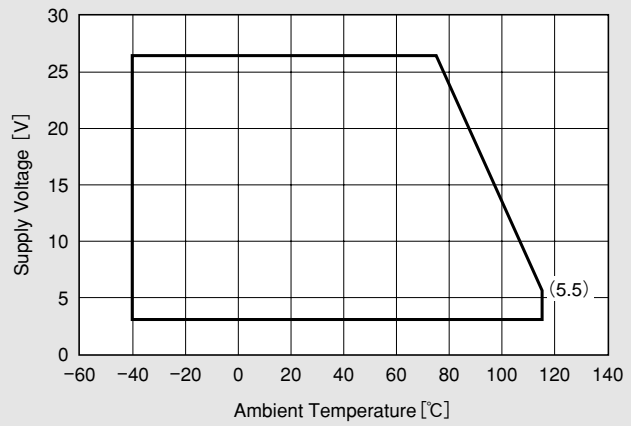


Note) The sensor center is located within the  $\phi 0.3$ mm circle.

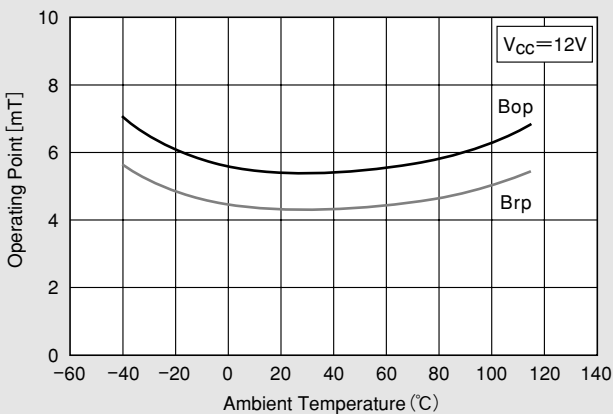
●(For reference only)Land Pattern (Unit:mm)



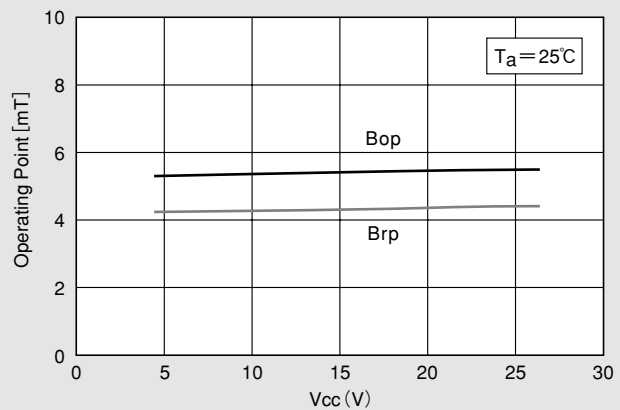
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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June 2, 2010

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