

# EW-402

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

EW-402 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 4.5~18V

Hall Element Continuous Excitation

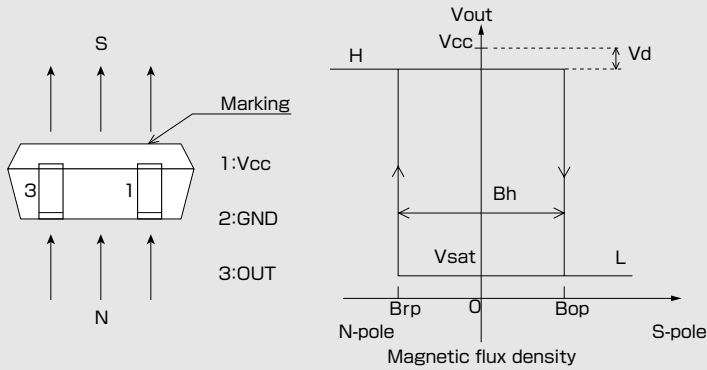
High Sensitivity Bop:10mT

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

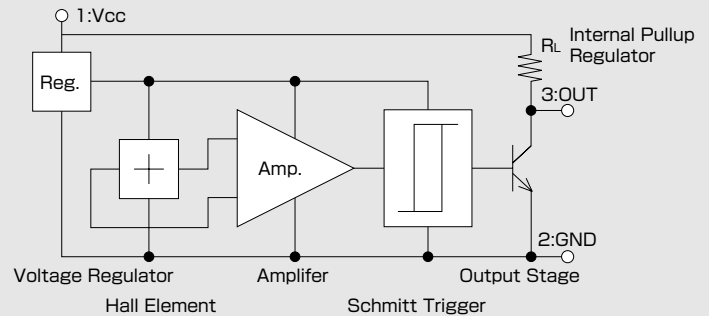


## Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	$V_{CC}$	18 <sup>(*)</sup>	V
Output H Voltage	$V_{O(off)}$	$V_{CC}$	V
Output L Current	$I_{sink}$	15	mA
Operating Temperature Range	$T_{opr}$	-20 ~ 115	°C
Storage Temperature Range	$T_{stg}$	-40 ~ 125	°C

(\*) Please refer to Supply Voltage Derating Curve.

## Functional Block Diagram



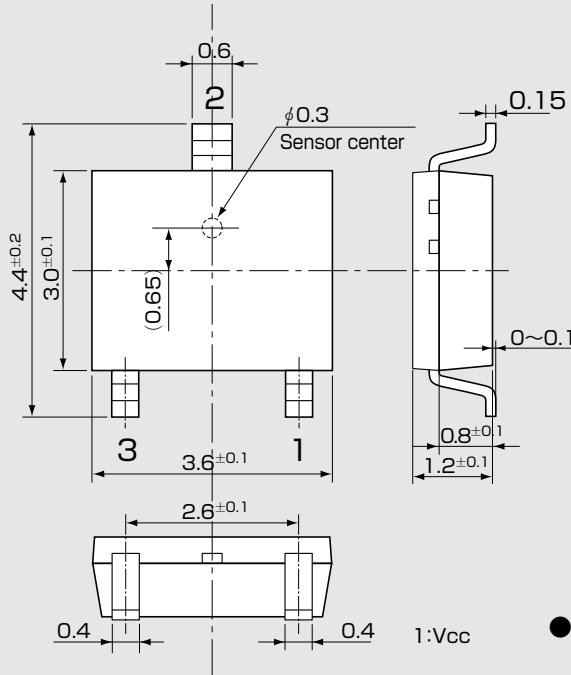
## Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	$V_{CC}$		4.5	12	18	V
Operating Point	$B_{OP}$	$V_{CC}=12V$	5		20	mT
Release Point	$B_{rp}$	$V_{CC}=12V$	-20		-5	mT
Hysteresis	$B_h$	$V_{CC}=12V$	10			mT
Output Down Voltage	$V_d$	$V_{CC}=12V, OUT="H"$			20	mV
Output Saturation Voltage	$V_{sat}$	$V_{CC}=12V, OUT="L"$			0.4	V
Supply Current	$I_{CC}$	$V_{CC}=12V, OUT="H"$			8	mA
Internal Load Resistance	$R_L$		7		13	KΩ

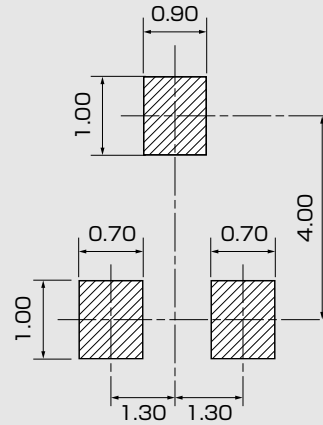
1 [mT] = 10 [Gauss]

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●Package (Unit:mm)



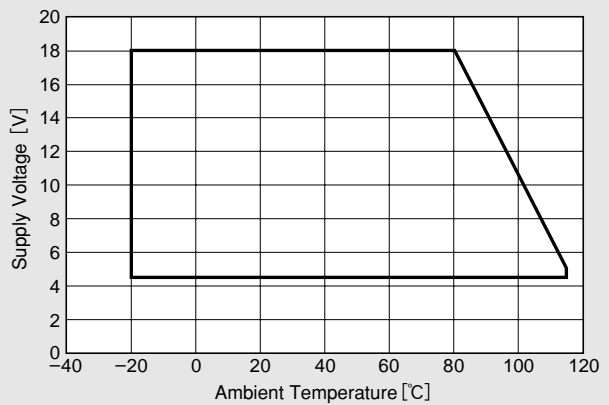
●(For reference only)Land Pattern (Unit:mm)



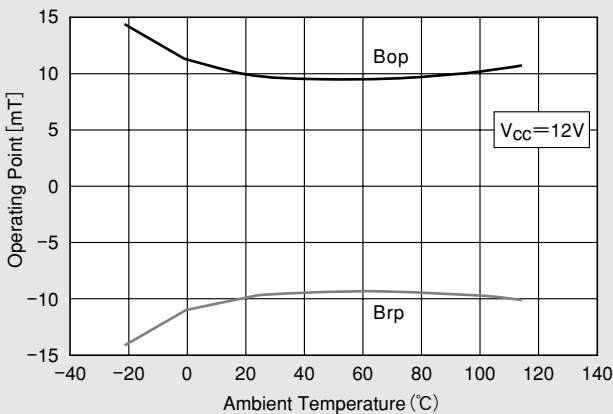
Note) The sensor center is located within the  $\phi 0.3\text{mm}$  circle.

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

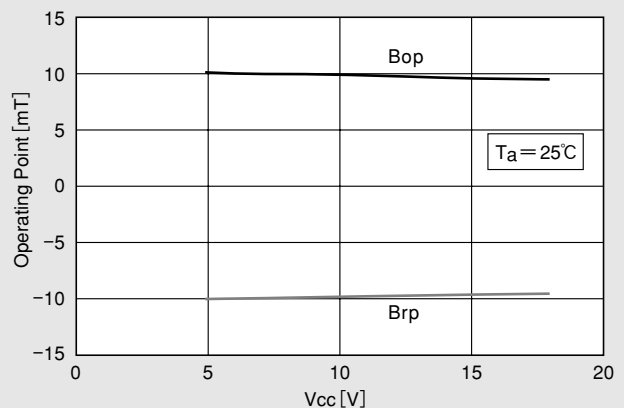
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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