

# EW-502

Shipped in bulk(500pcs/Bag)

EW-502 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

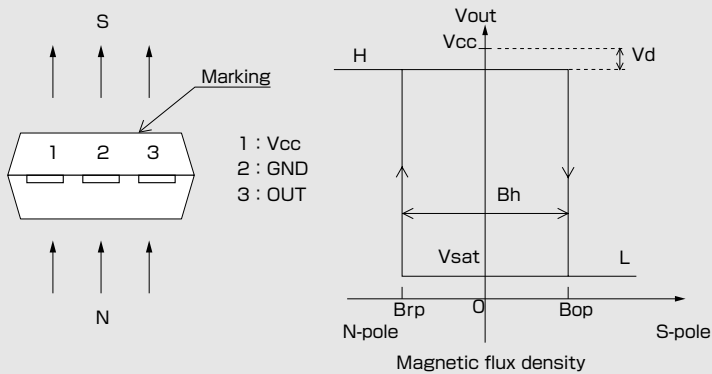
Low Sensitivity Bop:10mT

Output With pull-up Resistor

SIP

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

## Operational Characteristics

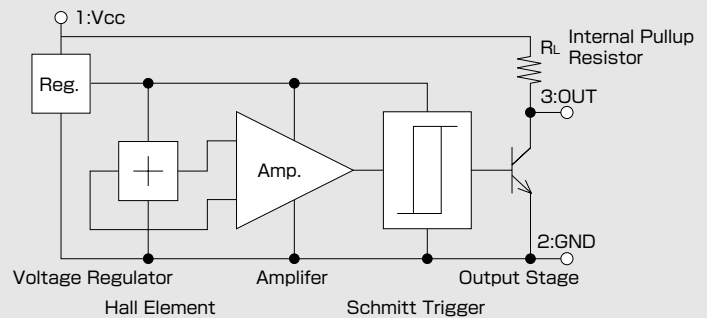


## Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	V <sub>CC</sub>	18 <sup>(*)</sup>	V
Output H Voltage	V <sub>o(off)</sub>	V <sub>CC</sub>	V
Output L Current	I <sub>sink</sub>	15	mA
Operating Temperature Range	T <sub>opr</sub>	-20 ~ 115	°C
Storage Temperature Range	T <sub>stg</sub>	-40 ~ 125	°C

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

## Functional Block Diagram



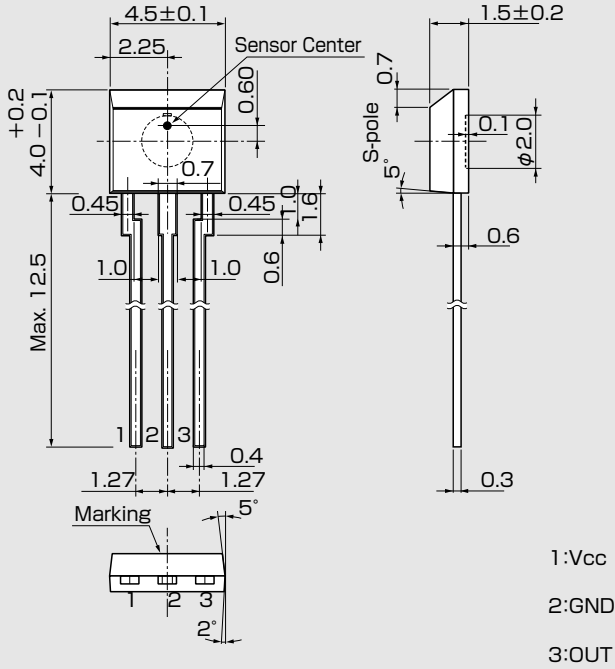
## Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	V <sub>CC</sub>		4.5	12	18	V
Operating Point	B <sub>op</sub>	V <sub>CC</sub> =12V	5		20	mT
Release Point	B <sub>rp</sub>	V <sub>CC</sub> =12V	-20		-5	mT
Hysteresis	B <sub>h</sub>	V <sub>CC</sub> =12V	10			mT
Output Down Voltage	V <sub>d</sub>	V <sub>CC</sub> =12V, OUT="H"			20	mV
Output Saturation Voltage	V <sub>sat</sub>	V <sub>CC</sub> =12V, OUT="L"			0.4	V
Supply Current	I <sub>CC</sub>	V <sub>CC</sub> =12V, OUT="H"			8	mA
Internal Load Resistance	R <sub>L</sub>		7		13	KΩ

1 [mT] = 10 [Gauss]

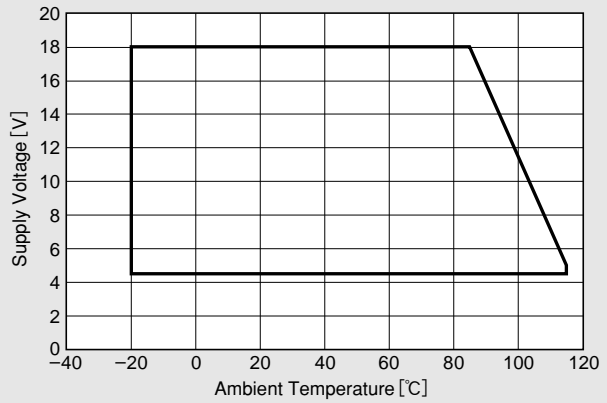
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●Package (Unit:mm)

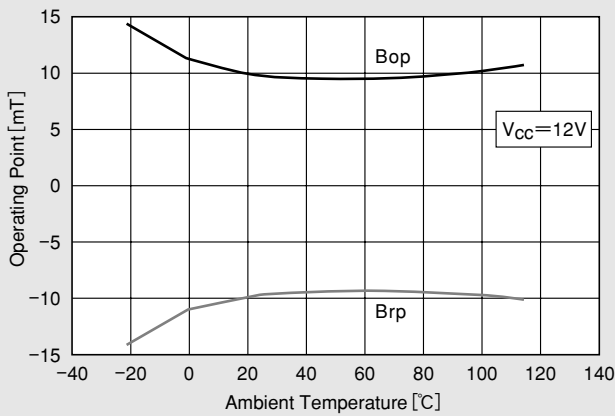


Note) The sensor center is located within the  $\phi 0.3$ mm circle.

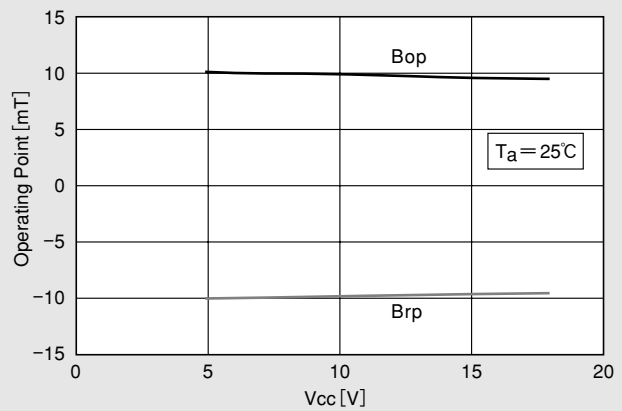
●Supply Voltage



●Temperature Dependence of Bop. Brp



●Supply Voltage Dependence of Bop. Brp



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June 2, 2010