

# EW-510

Shipped in bulk(500pcs/Bag)

EW-510 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

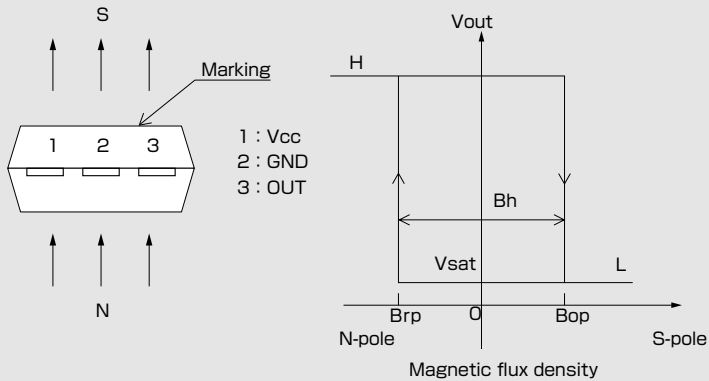
Low Sensitivity  
Bop:3mT

Output  
Open Collector

SIP

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

## ●Operational Characteristics

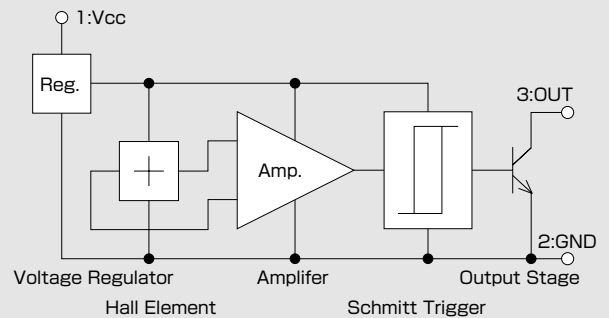


## ●Absolute Maximum Ratings (Ta=25°C)

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>	-30 ~ 115	°C
Storage Temperature Range	T <sub>stg</sub>	-40 ~ 125	°C

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

## ●Functional Block Diagram



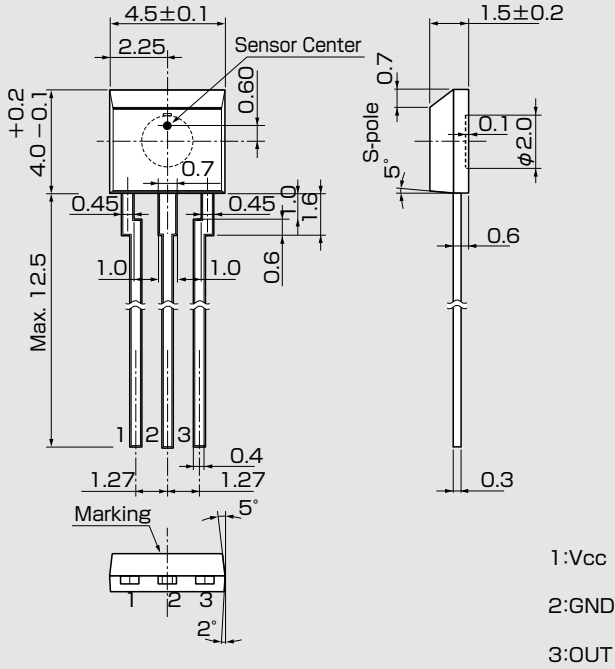
## ●Magnetic and Electrical Characteristics (Ta=25°C)

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	1		6	mT
Release Point	B <sub>rp</sub>	V <sub>CC</sub> =12V	-6		-1	mT
Hysteresis	B <sub>h</sub>	V <sub>CC</sub> =12V	2	6		mT
Output Saturation Voltage	V <sub>sat</sub>	V <sub>CC</sub> =12V, OUT"L", I <sub>sink</sub> =10mA			0.4	V
Output Leakage Current	I <sub>leak</sub>	V <sub>CC</sub> =12V, OUT"H", V <sub>out</sub> =12V			1	μA
Supply Current	I <sub>CC</sub>	V <sub>CC</sub> =12V, OUT"H"			8	mA

1 [mT] = 10 [Gauss]

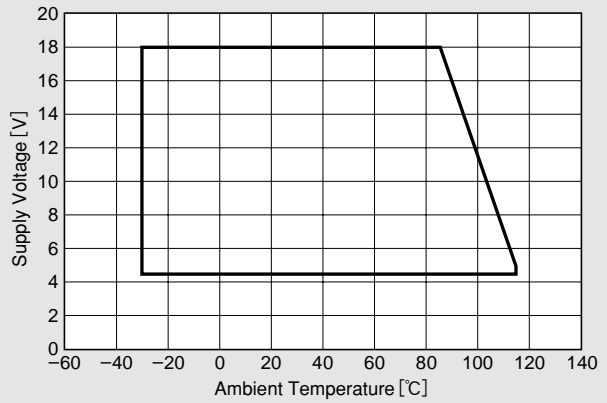
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●Package (Unit:mm)

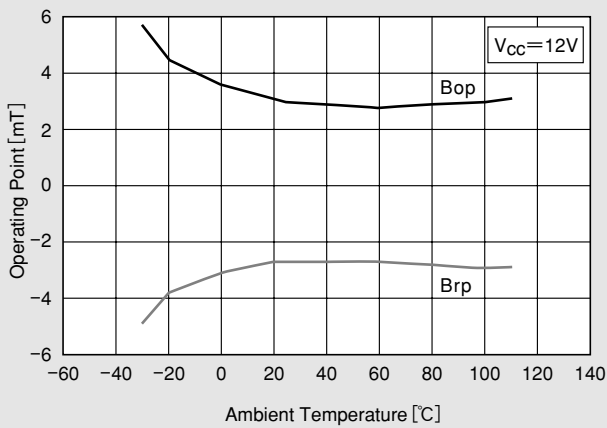


Note) The sensor center is located within the  $\phi 0.3\text{mm}$  circle.

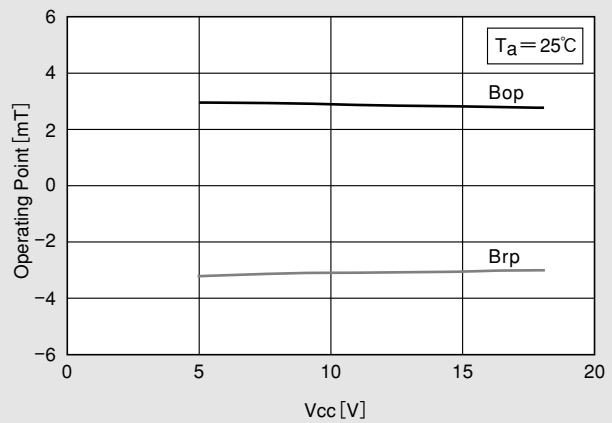
●Supply Voltage



●Temperature Dependence of Bop. Brp



●Supply Voltage Dependence of Bop. Brp



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June 2, 2010