

# EW-500

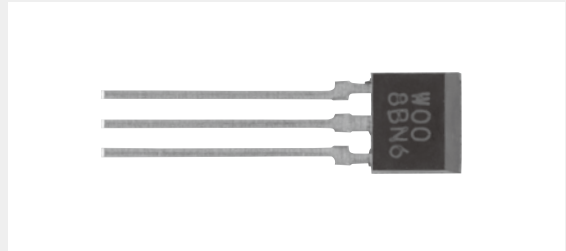
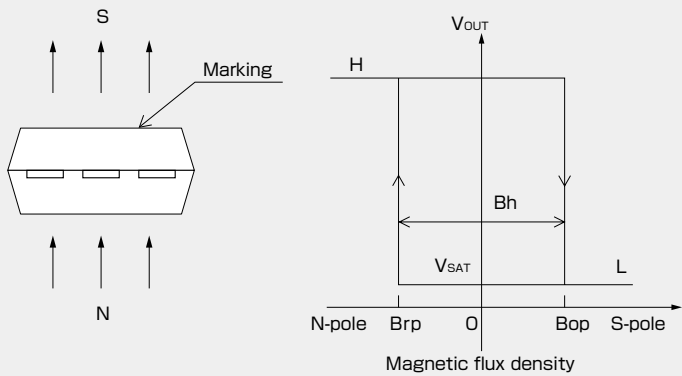
Shipped in bulk(500pcs/Bag)

EW-500 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 Open Collector	SIP
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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)

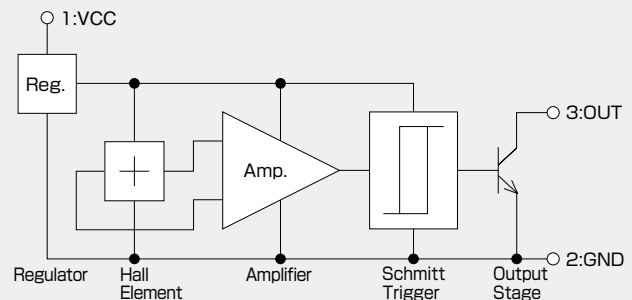
Item	Symbol	Min.	Max.	Unit
Supply Voltage	V <sub>CC</sub>	-0.3	18 <sup>(*)</sup>	V
Output H Voltage	V <sub>O(off)</sub>	-0.3	V <sub>CC</sub>	V
Output L Current	I <sub>SINK</sub>	0	15	mA
Storage Temperature Range	T <sub>STG</sub>	-40	+125	°C

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

## ●Recommended Operating Conditions

Item	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	V <sub>CC</sub>	4.5	12	18	V
Operating Temperature Range	T <sub>opr</sub>	-30	+25	+115	°C

## ●Functional Block Diagram



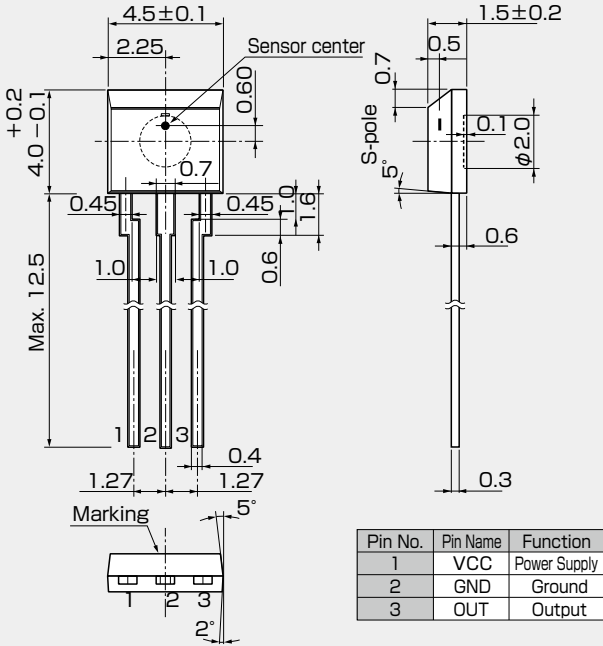
## ●Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Operating Point	Bop	V <sub>CC</sub> =12V	5	10	20	mT
Releasing Point	Brp	V <sub>CC</sub> =12V	-20	-10	-5	mT
Hysteresis	Bh	V <sub>CC</sub> =12V	10	20		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]

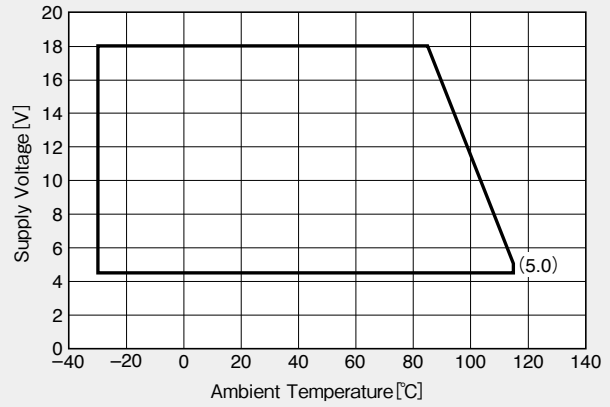
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●Package (Unit:mm)

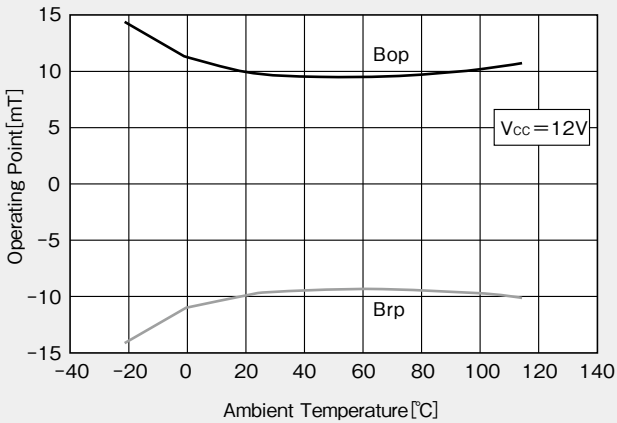


Note1) The sensor center is located within the  $\phi 0.3\text{mm}$  circle.  
 Note2) The sensor part is located 0.5mm(typ.) far from marking surface.

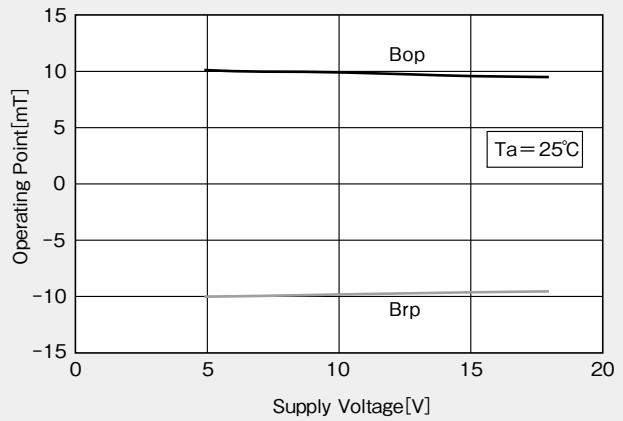
●Supply Voltage Derating Curve



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



c

d

i

p

q

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