

# EW-400

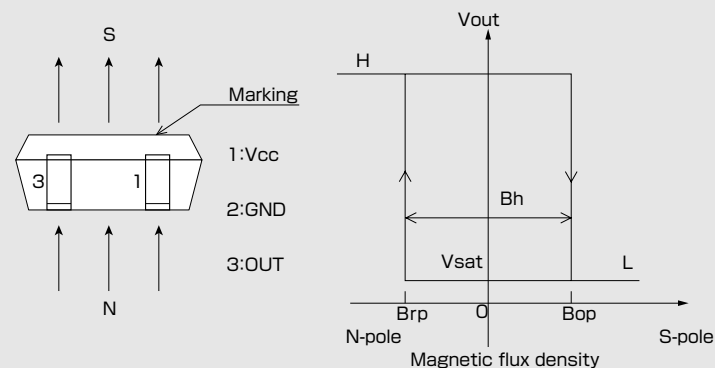
Shipped in packet-tape reel(5000pcs/Reel)

EW-400 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	SMT
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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

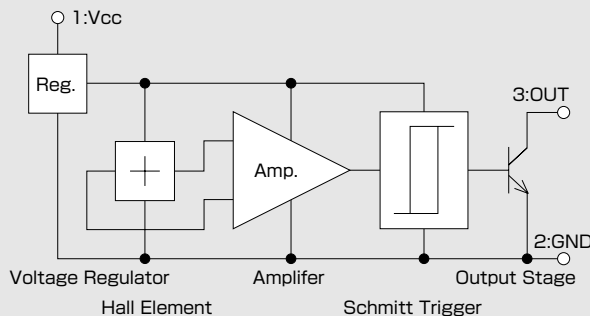


## Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	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



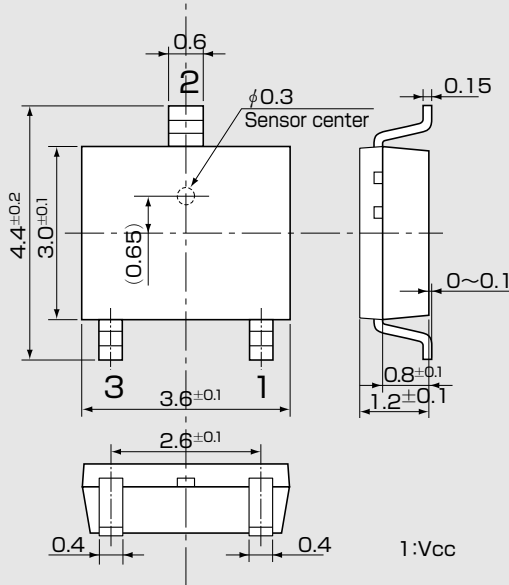
## Magnetic and Electrical Characteristics (Ta=25°C)

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 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	$I_{CC}$	$V_{CC}=12V, OUT"H"$			8	mA

1 [mT] = 10 [Gauss]

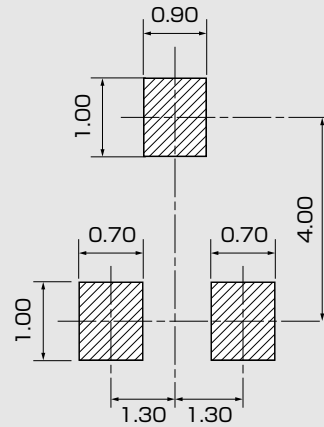
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●Package (Unit:mm)

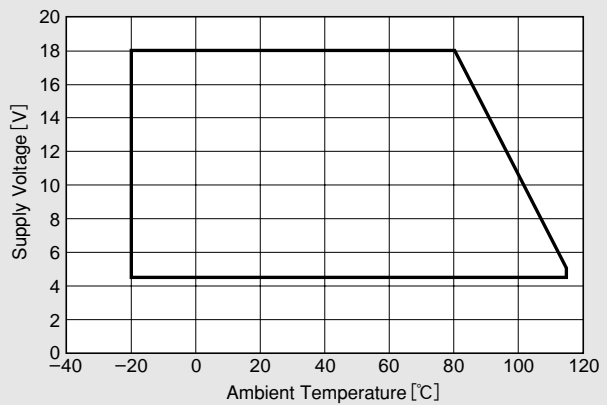


Note1) The sensor center is located within the  $\phi 0.3$ mm circle.  
 Note2) The metal portions on the package side (support lead) are connected to the internal circuits. The support lead should be isolate from the external circuit and the other support lead.

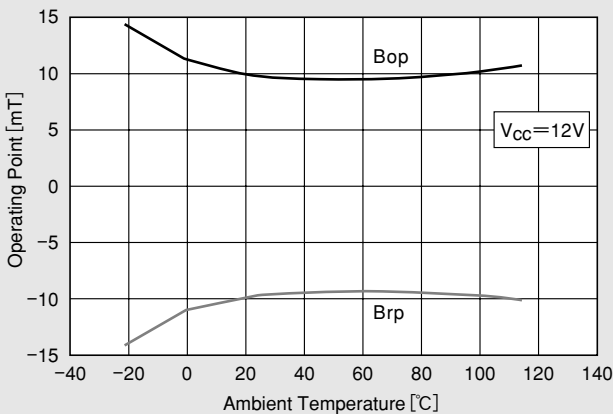
●(For reference only)Land Pattern (Unit:mm)



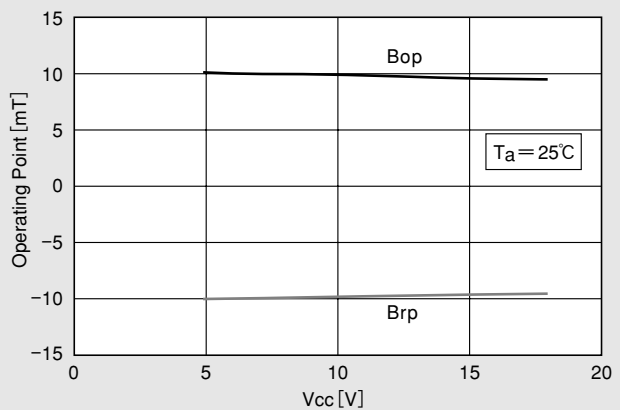
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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April 4, 2012