

EW-450

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

EW-450 is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

Unipolar Hall
Effect Switch

Supply Voltage
4.5~18V

Hall Element
Continuous
Excitation

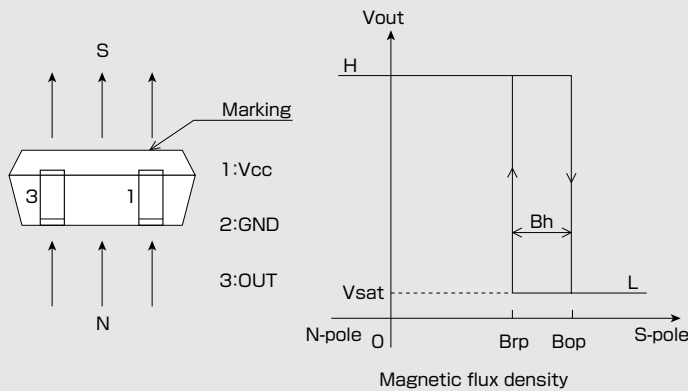
Low Sensitivity
Bop: 10mT

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

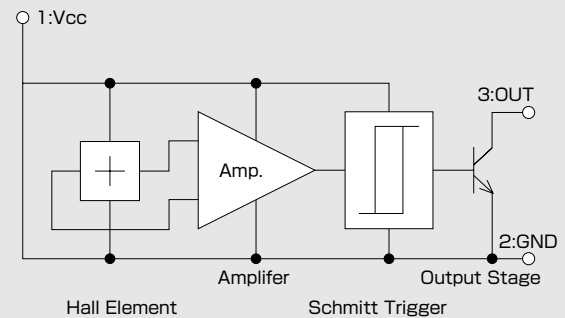


●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	V_{CC}	18 ^(*)	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



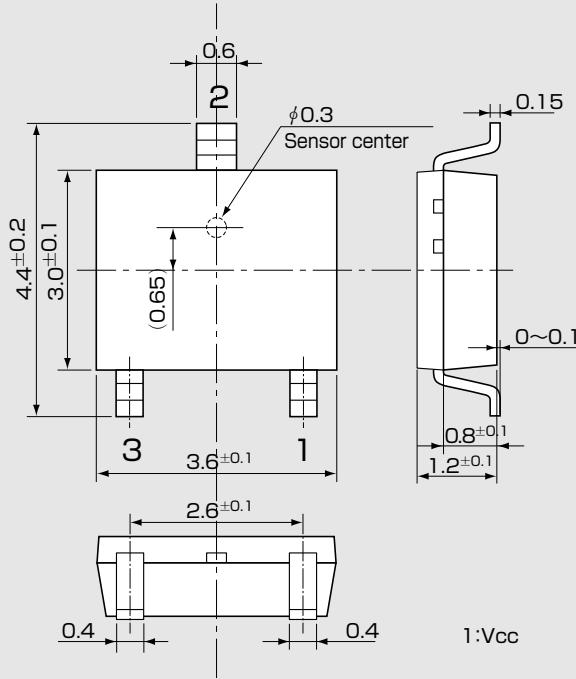
●Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	V_{CC}		4.5	12	18	V
Operating Point	B_{OP}	$V_{CC}=12V$			20	mT
Release Point	B_{rp}	$V_{CC}=12V$	5			mT
Hysteresis	B_h	$V_{CC}=12V$	1.5			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	μA
Supply Current	I_{CC}	$V_{CC}=12V, OUT"H"$			8	mA

1 [mT] = 10 [Gauss]

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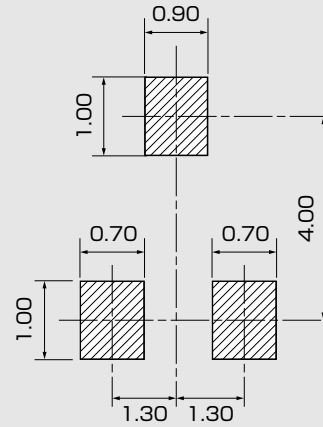
●Package (Unit:mm)



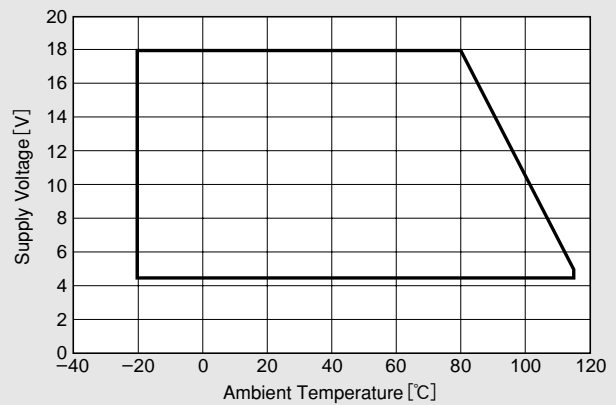
Note1) The sensor center is located within the $\phi 0.3\text{mm}$ circle.
 Note2) The metal portions on the package side (support lead) are connected to the internal circuits. The support lead should be isolate from the external circuit and the other support lead.

1:Vcc
 2:GND
 3:OUT

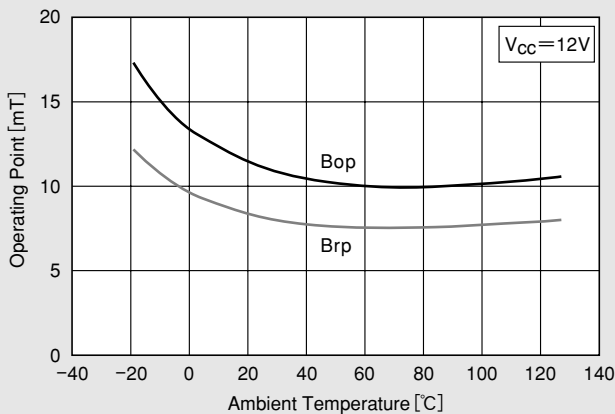
●(For reference only)Land Pattern (Unit:mm)



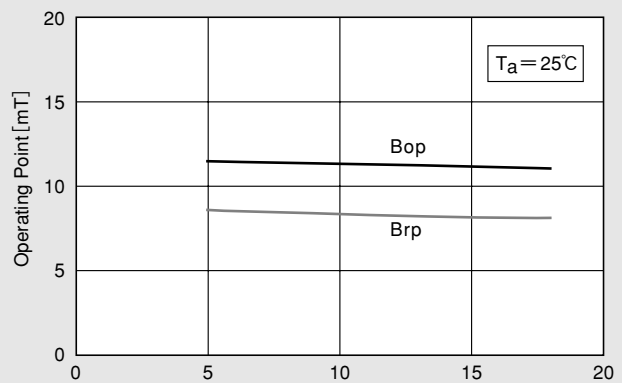
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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March 14, 2012