

# **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.

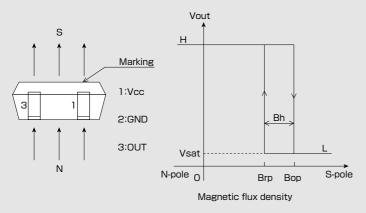
Unipolar Hall Effect Switch Supply Voltage 4.5~18V

Hall Element Continuous Excitation Low Sensitivity Bop: 1 OmT

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



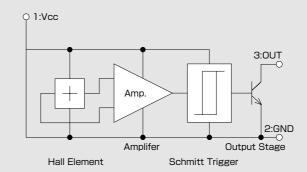


### ● Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit	
Supply Voltage	V <sub>CC</sub>	18**	V	
Output H Voltage	V <sub>o(off)</sub>	V <sub>cc</sub>	V	
Output L Current	Isink	15	mA	
Operating Temperature Range	Topr	−20 ~ 115	°C	
Storage Temperature Range	Tstg	<b>−40</b> ~ 125	°C	

 $<sup>(\</sup>textcolor{red}{*})\, \textbf{Please refer to Supply Voltage Derating Curve}.$ 

### •Functional Block Diagram



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

Item	Symbol	Conditions	Min.	Тур.	Max.	Unit
Supply Voltage	V <sub>CC</sub>		4.5	12	18	V
Operating Point	B <sub>OP</sub>	V <sub>CC</sub> =12V			20	mT
Release Point	B <sub>rp</sub>	V <sub>CC</sub> =12V	5			mT
Hysteresis	Bh	V <sub>CC</sub> =12V	1.5			mT
Output Saturation Voltage	V <sub>sat</sub>	V <sub>CC</sub> =12V,OUT"L",I Sink=10mA			0.4	V
Output Leakage Current	I <sub>leak</sub>	V <sub>CC</sub> =12V,OUT"H",V <sub>OUt</sub> =12V			1	μΑ
Supply Current	$I_{CC}$	V <sub>CC</sub> =12V,OUT"H"			8	mA

1 [mT] =10 [Gauss]

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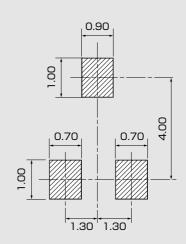
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### ●Package (Unit:mm)

# 3 3.6±0.1 1 1.2±0.1 2.6±0.1

0.4

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



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

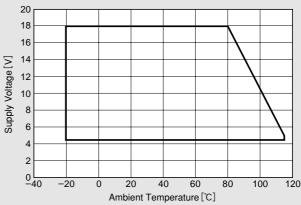
0.4

2:GND

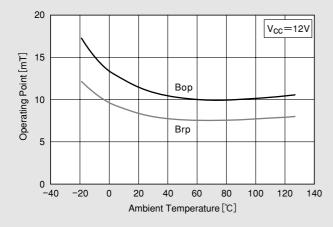
Supply Voltage

1:Vcc

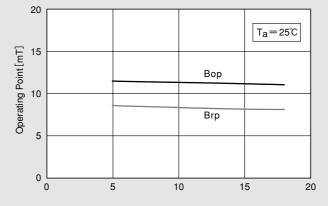
3:0UT



### ●Temparature Dependence of Bop. Brp



### Supply Voltage Dependence of Bop. Brp



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