

# **EW-550**

Shipped in bulk(500pcs/Bag)

EW-550 is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

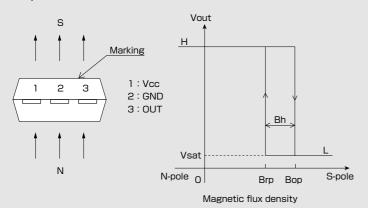
Unipolar Hall Effect Switch Supply Voltage 4.5~18V

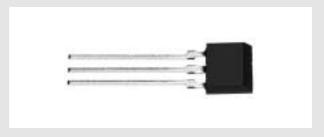
Hall Element Continuous Excitation Low Sensitivity Bop:10mT Output
Open Collector

SIP

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

### Operational Characteristics



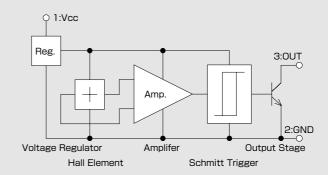


## ● Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit	
Supply Voltage	V <sub>CC</sub>	18**	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	−40 ~ 125	°C	

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

## ●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	٧
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 <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	μΑ
Supply Current	$I_{CC}$	V <sub>CC</sub> =12V,OUT"H"			8	mA

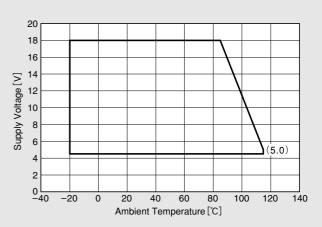
1 [mT] =10 [Gauss]

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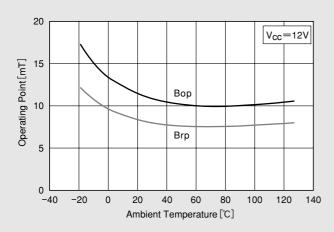
## ●Package (Unit:mm) 1.5±0.2 4.5±0.1 Sensor Center 09 +0.2 4.0 - 0.1 S-pole 0.10 ผ <del>อ</del> ດນ໌ ະ 0.6 Max. 12.5 1.27 1.27 0.3 Marking 1:Vcc 2:GND 3:0UT

## Supply Voltage

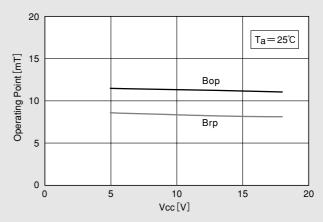


Note) The sensor center is located within the  $\phi$ 0.3mm circle.

## ●Temparature Dependence of Bop. Brp



## Supply Voltage Dependence of Bop. Brp



С

I

h

q

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