

# 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

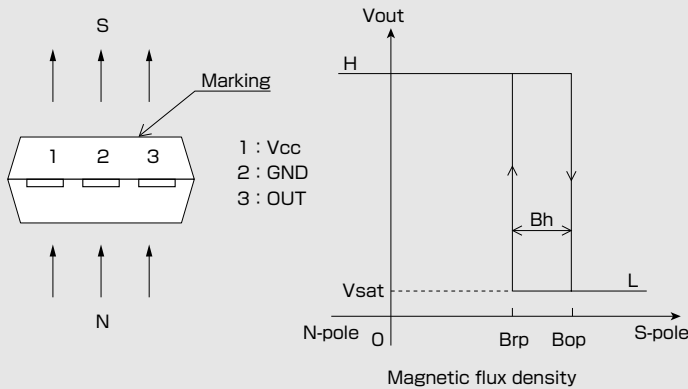
Low Sensitivity Bop:10mT

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

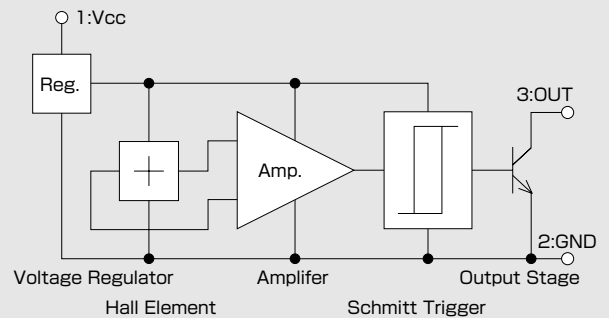


## ●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	$V_{CC}$	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



Another product type with pulled-up resistor(EW-552). Please contact AKEMD to obtain the detail information.

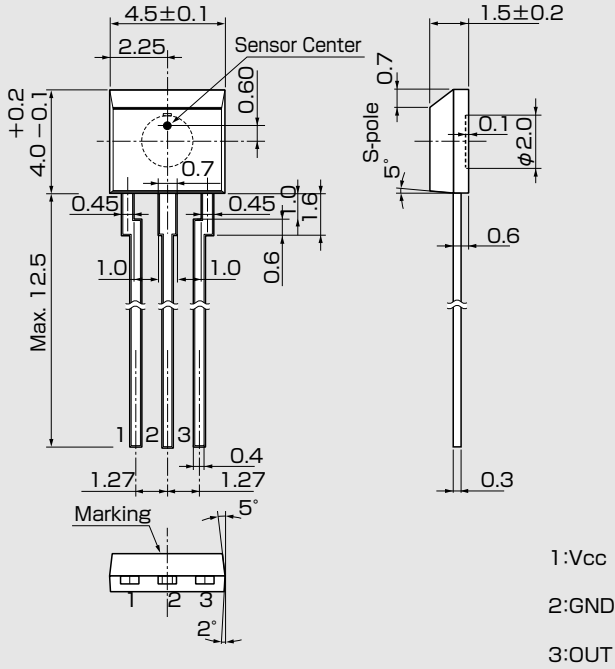
## ●Magnetic and Electrical Characteristics (Ta=25°C)

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	$\mu A$
Supply Current	$I_{CC}$	$V_{CC}=12V, OUT"H"$			8	mA

1 [mT] = 10 [Gauss]

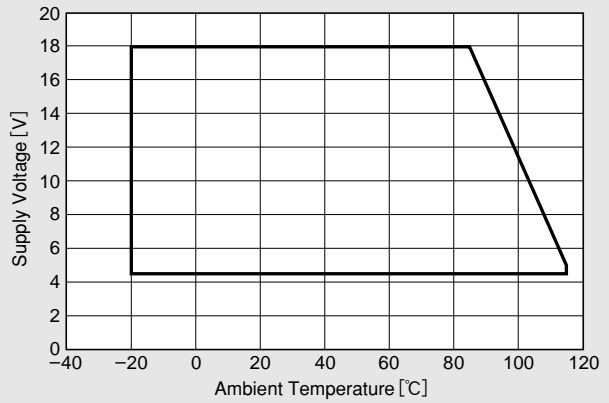
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●Package (Unit:mm)

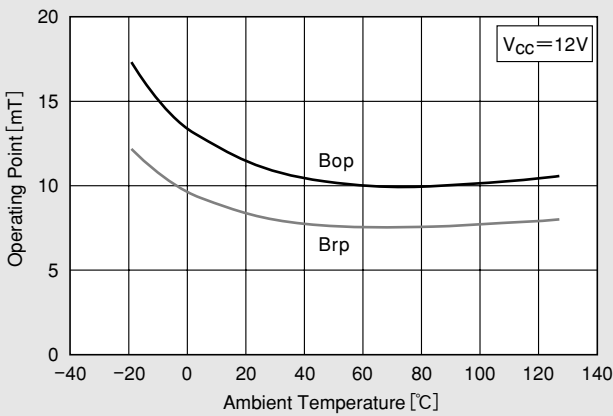


Note) The sensor center is located within the  $\phi 0.3\text{mm}$  circle.

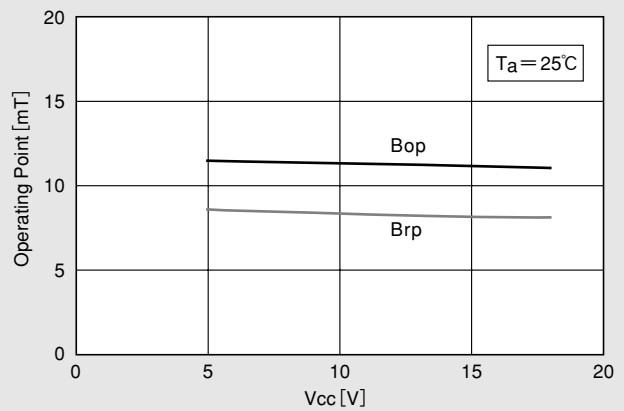
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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