

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

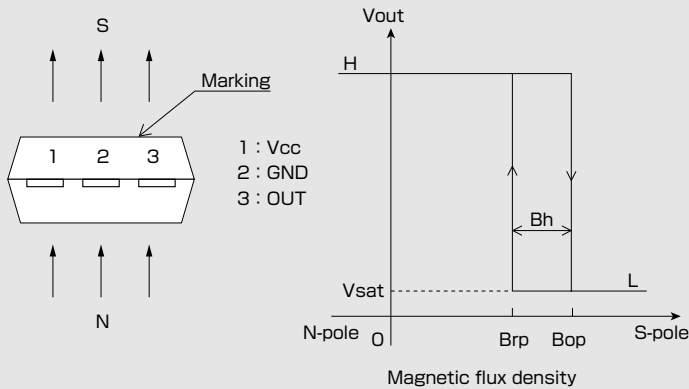
Low Sensitivity Bop:10mT

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

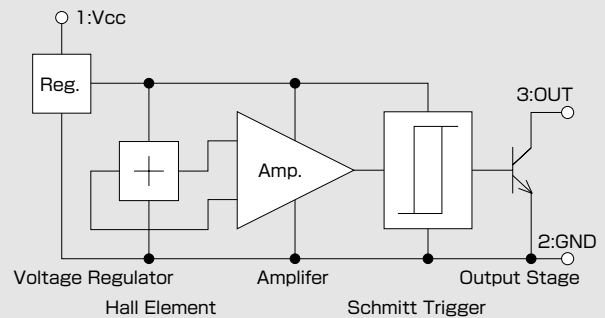


●Absolute Maximum Ratings (Ta=25°C)

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



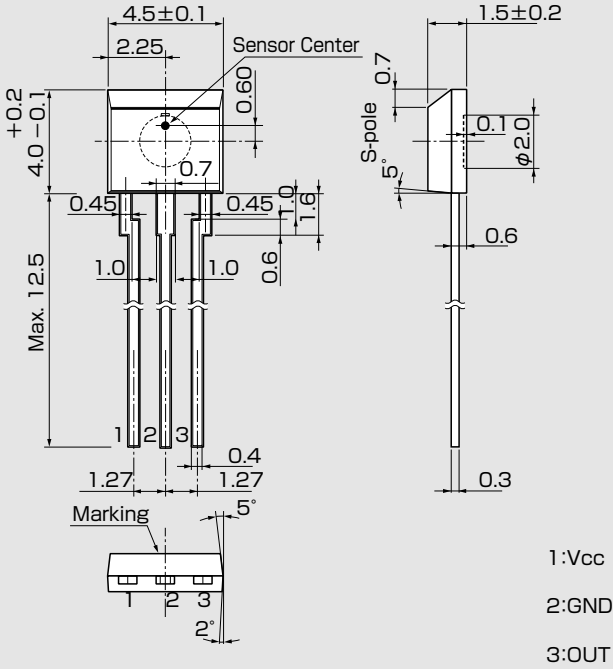
●Magnetic and Electrical Characteristics (Ta=25°C)

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]

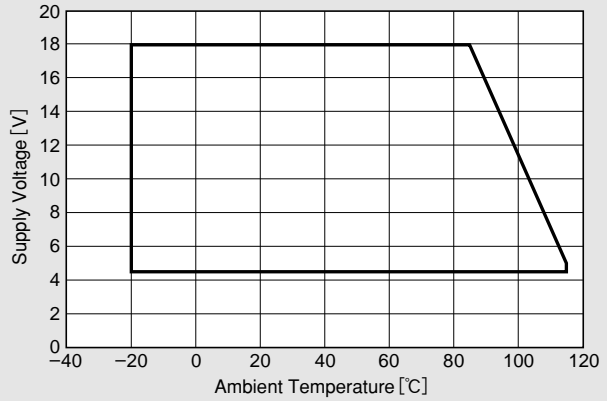
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●Package (Unit:mm)

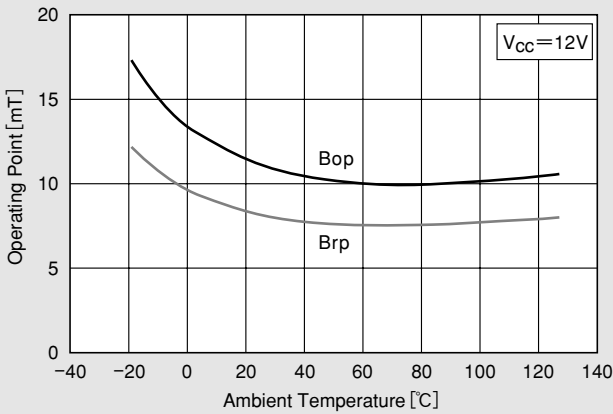


Note) The sensor center is located within the $\phi 0.3$ mm circle.

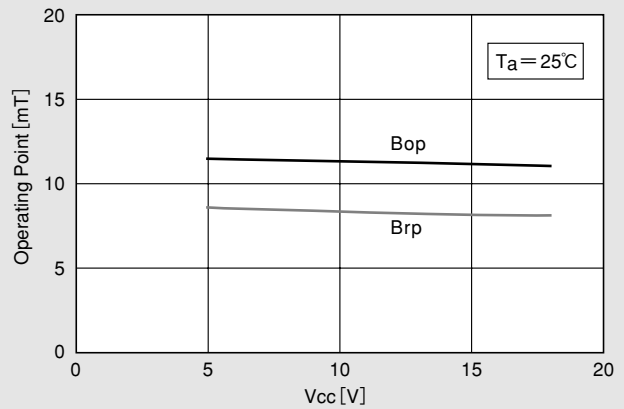
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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April 19, 2010