

EW-512

Shipped in bulk(500pcs/Bag)

EW-512 is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

Bipolar Hall Effect Latch

Supply Voltage 4.5~18V

Hall Element Continuous Excitation

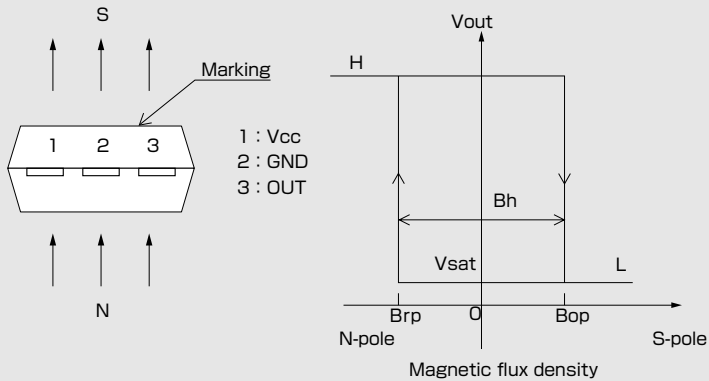
Low Sensitivity $B_{op}:3mT$

Output With pull-up Resistor

SIP

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

●Operational Characteristics

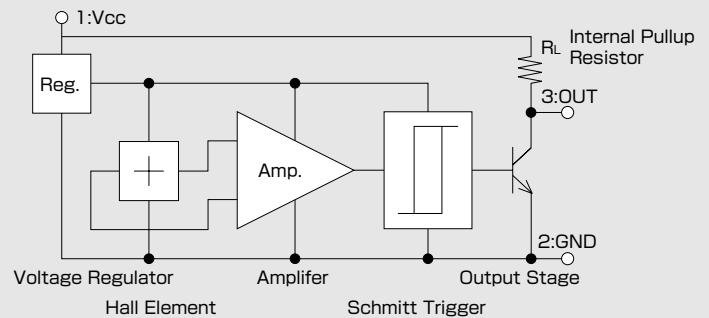


●Absolute Maximum Ratings (Ta=25°C)

| 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} | -30 ~ 115 | °C |
| Storage Temperature Range | T _{stg} | -40 ~ 125 | °C |

(*) Please refer to Supply Voltage Derating Curve.

●Functional Block Diagram



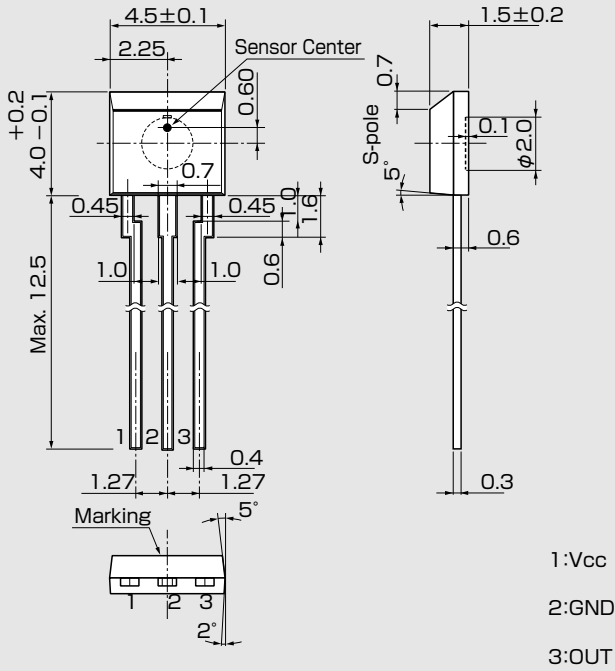
●Magnetic and Electrical Characteristics (Ta=25°C)

| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|---------------------------|------------------|---|------|------|------|------|
| Supply Voltage | V _{CC} | | 4.5 | 12 | 18 | V |
| Operating Point | B _{OP} | V _{CC} =12V | 1 | | 6 | mT |
| Release Point | B _{RP} | V _{CC} =12V | -6 | | -1 | mT |
| Hysteresis | B _H | V _{CC} =12V | 2 | 6 | | mT |
| Output Down Voltage | V _d | V _{CC} =12V, OUT"H" | | | 20 | mV |
| Output Saturation Voltage | V _{SAT} | V _{CC} =12V, OUT"L", I _{SINK} =10mA | | | 0.4 | V |
| Supply Current | I _{CC} | V _{CC} =12V, OUT"H" | | | 8 | mA |
| Internal Load Resistance | R _L | | 7 | | 13 | KΩ |

1 [mT] = 10 [Gauss]

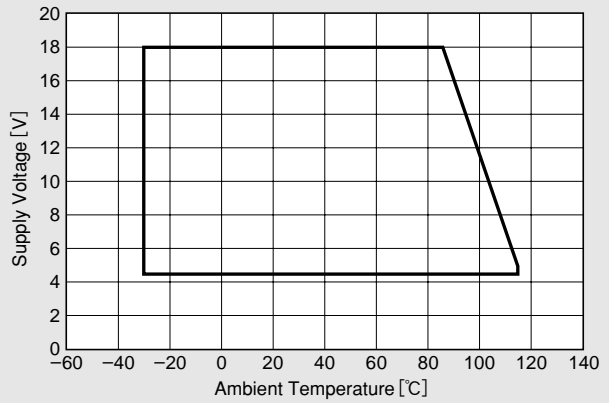
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●Package (Unit:mm)

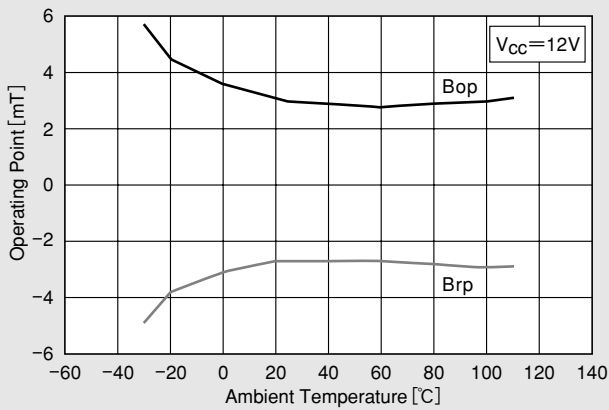


Note) The sensor center is located within the $\phi 0.3\text{mm}$ circle.

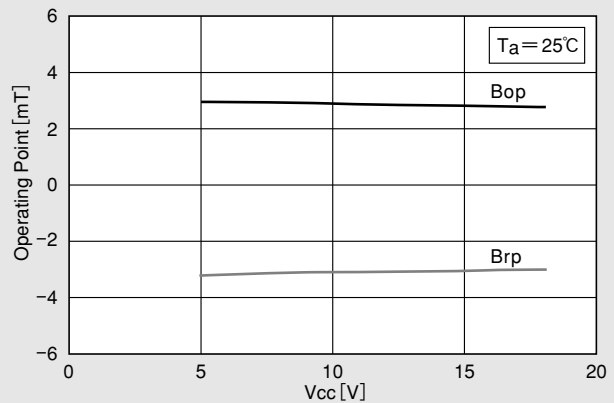
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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June 2, 2010