# EW-500

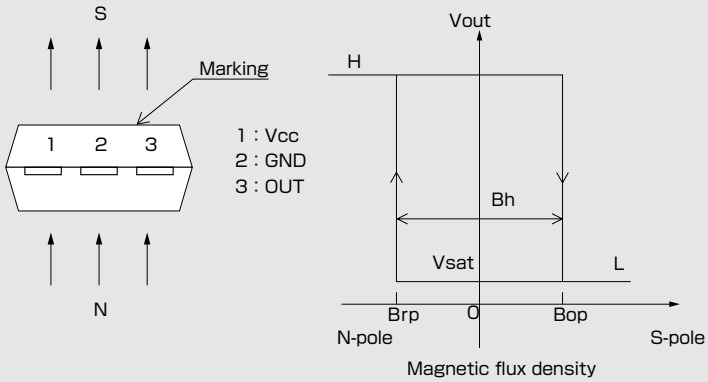
Shipped in bulk(500pcs/Bag)

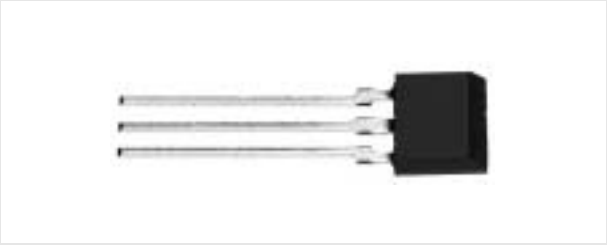
EW-500 is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

| | | | | | |
|---|---|---|---|---|---|
| Bipolar Hall Effect Latch | Supply Voltage 4.5～18V | Hall Element Continuous Excitation | Low Sensitivity 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



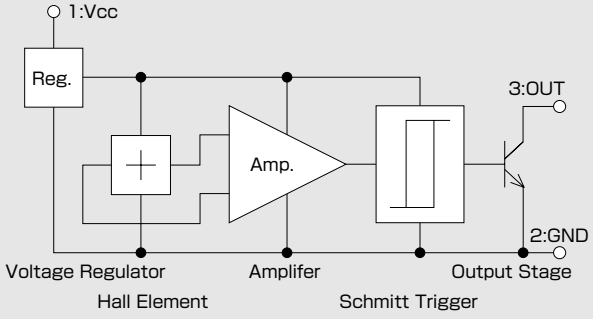



## ●Absolute Maximum Ratings (Ta=25℃)

| Item | Symbol | Limit | Unit |
|---|---|---|---|
| Supply Voltage | $V_{CC}$ | 18(*) | V |
| Output H Voltage | $V_{O(off)}$ | $V_{CC}$ | V |
| Output L Current | Isink | 15 | mA |
| Operating Temperature Range | Topr | −20 ～ 115 | ℃ |
| Storage Temperature Range | Tstg | −40 ～ 125 | ℃ |

(*) Please refer to Supply Voltage Derating Curve.

## ●Functional Block Diagram

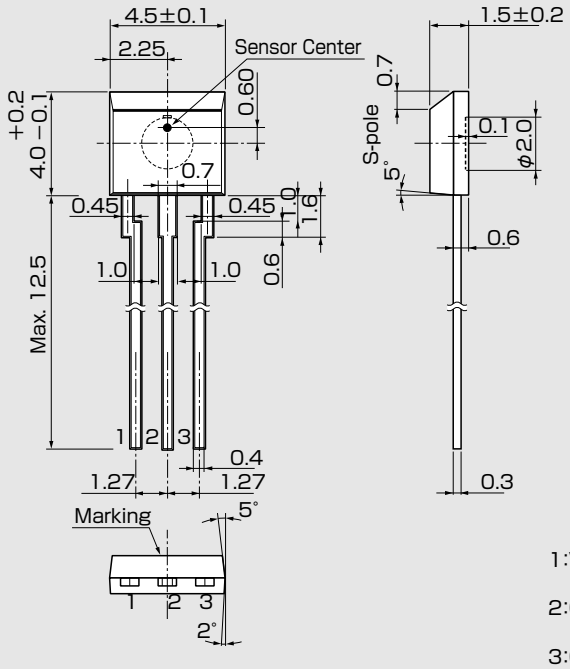



## ●Magnetic and Electrical Characteristics (Ta=25℃)

| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|
| Supply Voltage | $V_{CC}$ | | 4.5 | 12 | 18 | V |
| Operating Point | $B_{OP}$ | $V_{CC}$=12V | 5 | | 20 | mT |
| Release Point | $B_{rp}$ | $V_{CC}$=12V | −20 | | −5 | mT |
| Hysteresis | $B_h$ | $V_{CC}$=12V | 10 | | | 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]

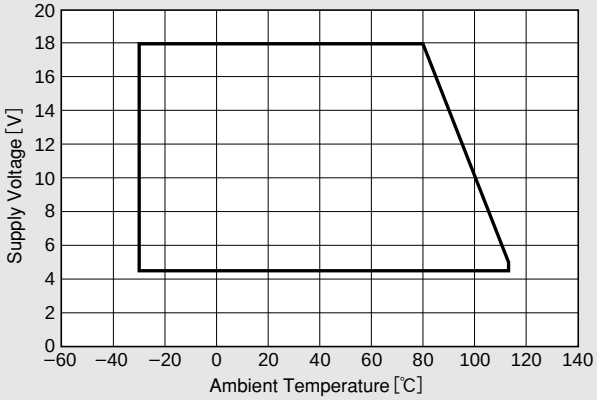
## ●Package (Unit:mm)



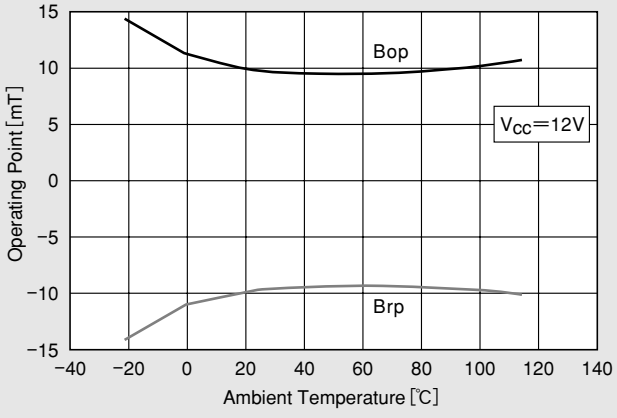

1:Vcc
2:GND
3:OUT

Note) The sensor center is located within the φ0.3mm circle.

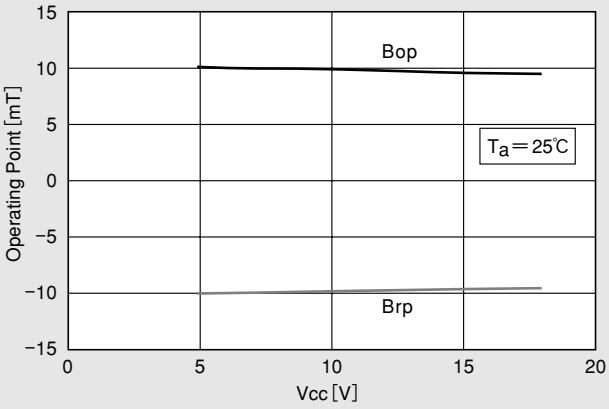
## ●Supply Voltage




## ●Temparature Dependence of Bop. Brp




## ●Supply Voltage Dependence of Bop. Brp



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April 4, 2012