

EW-413

Shipped in packet-tape reel(5000pcs/Reel)

EW-413 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
2.5~5.5V

Hall Element
Continuous
Excitation

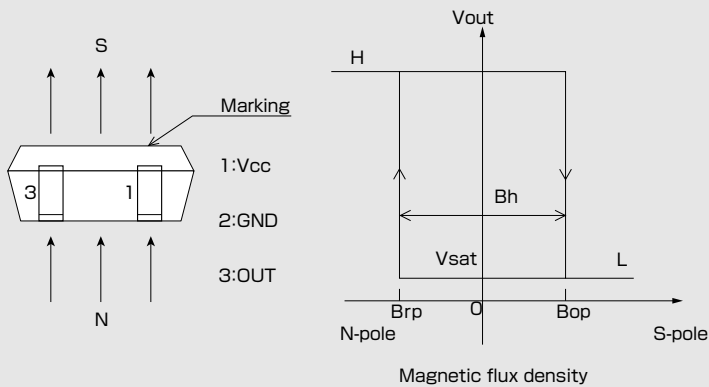
High Sensitivity
Bop:3mT

Output
Open Collector

SMT

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

●Operational Characteristics

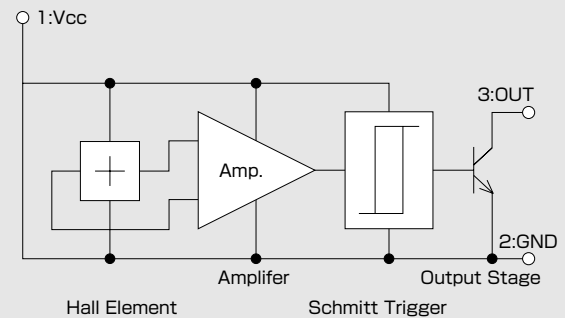


●Absolute Maximum Ratings (Ta=25°C)

| Item | Symbol | Limit | Unit |
|-----------------------------|--------------|--------------------|------|
| Supply Voltage | V_{CC} | 5.5 ^(*) | 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



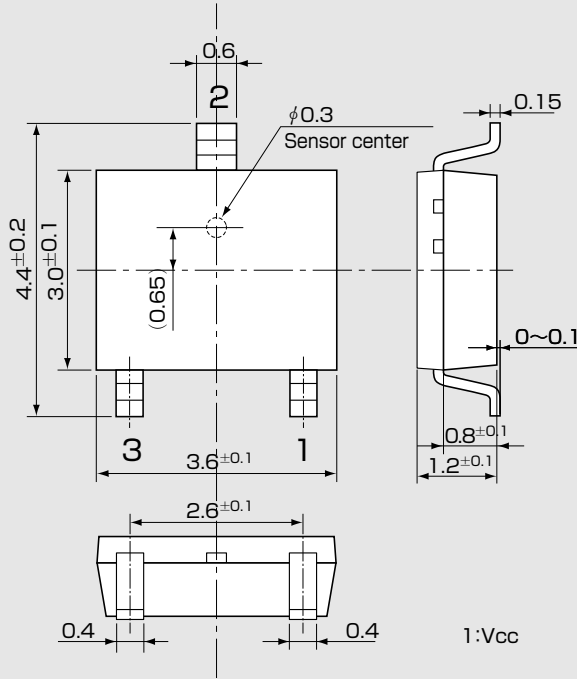
●Magnetic and Electrical Characteristics (Ta=25°C)

| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|---------------------------|------------|------------------------------------|------|------|------|---------|
| Supply Voltage | V_{CC} | | 2.5 | 3 | 5.5 | V |
| Operating Point | B_{OP} | $V_{CC}=3V$ | 1 | | 6 | mT |
| Release Point | B_{rp} | $V_{CC}=3V$ | -6 | | -1 | mT |
| Hysteresis | B_h | $V_{CC}=3V$ | 2 | | | mT |
| Output Saturation Voltage | V_{sat} | $V_{CC}=3V, OUT"L", I_{sink}=10mA$ | | | 0.4 | V |
| Output Leakage Current | I_{leak} | $V_{CC}=3V, OUT"H", V_{out}=3V$ | | | 1 | μA |
| Supply Current | I_{CC} | $V_{CC}=3V, OUT"H"$ | | | 8 | mA |

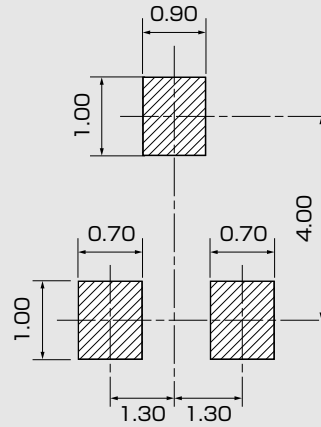
1 [mT] = 10 [Gauss]

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●Package (Unit:mm)



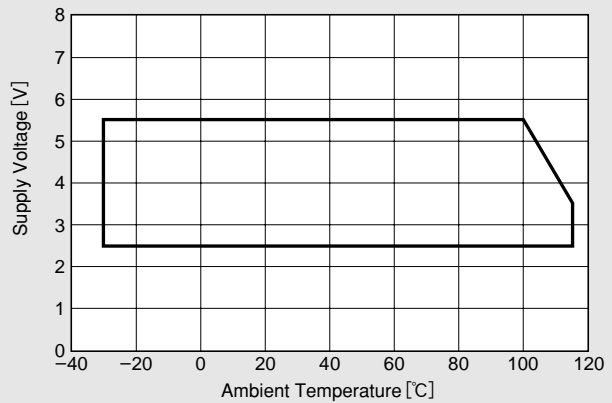
●(For reference only)Land Pattern (Unit:mm)



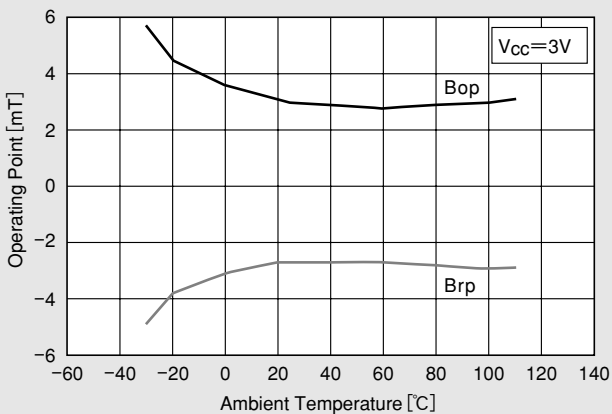
Note) The sensor center is located within the φ0.3mm circle.

- 1:Vcc
- 2:GND
- 3:OUT

●Supply Voltage



●Temperature Dependence of Bop. Brp



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