

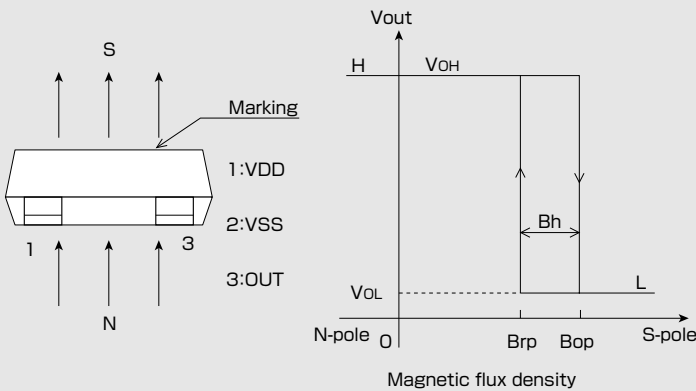
EW-6672

Shipped in packet-tape reel(3000pcs/Reel)

EW-6672 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 2.4~3.3V | Hall Element Pulse Excitation | Ultra High Sensitivity Bop: 1.5mT | Output CMOS | SMT |
|-----------------------------|----------------------------|-------------------------------|--------------------------------------|-------------|-----|

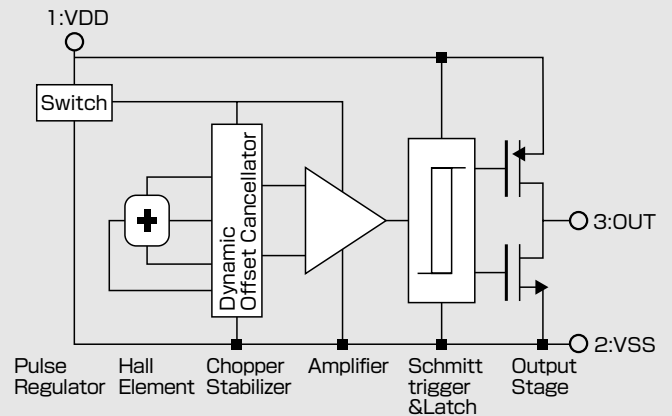
●Operational Characteristics



●Absolute Maximum Ratings (Ta=25°C)

| Item | Symbol | Limit | Unit |
|-----------------------------|------------------|------------|------|
| Supply Voltage | VDD | -0.1 ~ 5.0 | V |
| Output Current | I _{out} | ±1 | mA |
| Operating Temperature Range | Topr | -30 ~ 85 | °C |
| Storage Temperature Range | Tstg | -40 ~ 125 | °C |

●Functional Block Diagram



●Magnetic ① and Electrical Characteristics (Ta=25°C VDD=3V)

| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|---------------------|-----------------|------------------------|-----------|------|------|------|
| Supply Voltage | VDD | | 2.4 | 3.0 | 3.3 | V |
| Operating Point | B _{OP} | | 1.0* | 1.5 | 2.3 | mT |
| Release Point | B _{RP} | | 0.8 | 1.2 | 1.9* | mT |
| Hysteresis | B _H | | 0.1* | 0.3 | 0.6* | mT |
| Period | T _P | | | 50 | 100 | ms |
| Output High Voltage | VOH | I _o =-1.0mA | VDD - 0.4 | | | V |
| Output Low Voltage | VOL | I _o =+1.0mA | | | 0.4 | V |
| Supply Current | IDD | Average | | 5 | 10 | μA |

1 [mT]=10 [Gauss]

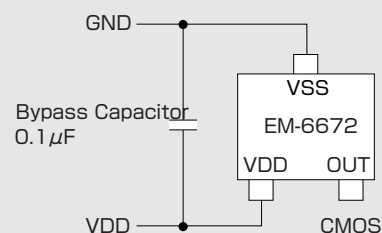
The characteristics with [*] marks are design targets.

●Magnetic Characteristics ② (Ta=-30°C~85°C VDD=3V)

| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|-----------------|-----------------|------------|------|------|------|------|
| Operating Point | B _{OP} | | 0.9 | 1.5 | 2.9 | mT |
| Release Point | B _{RP} | | 0.8 | 1.2 | 2.3 | mT |
| Hysteresis | B _H | | 0.1 | 0.3 | 0.8 | mT |

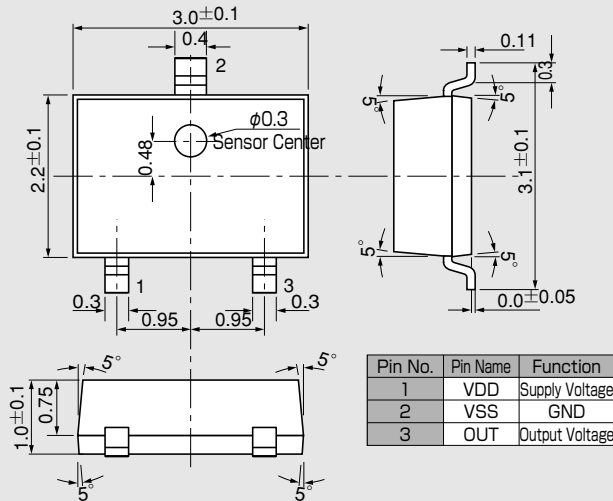
Note) The above specifications are design targets.

●Application Circuit



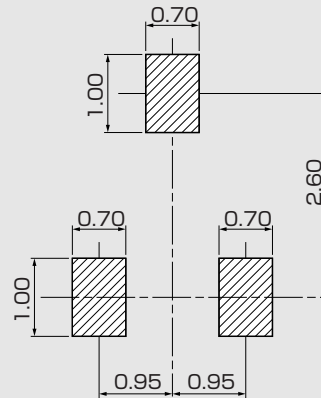
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●Package (Unit:mm)

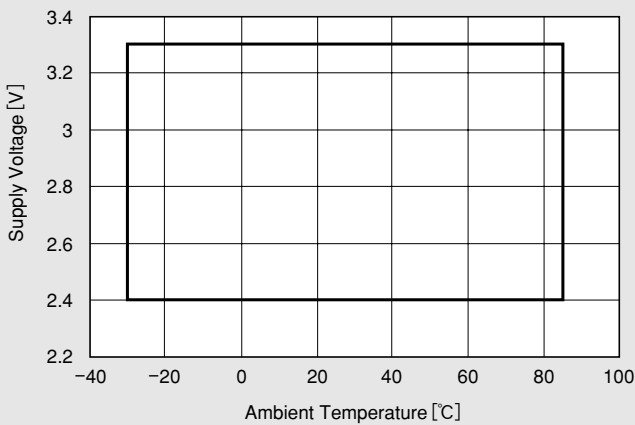


Note) The sensor center is located within the $\phi 0.3$ mm circle.

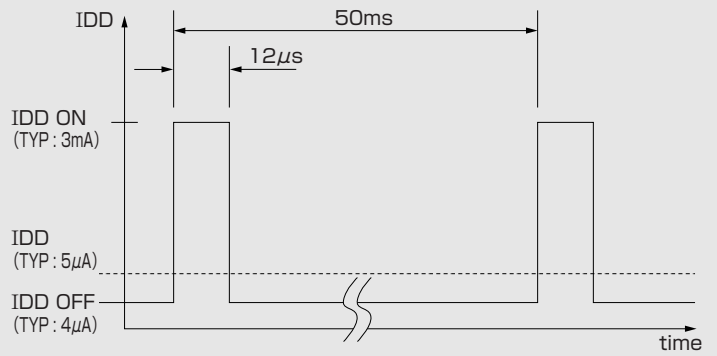
●(For reference only)Land Pattern (Unit:mm)



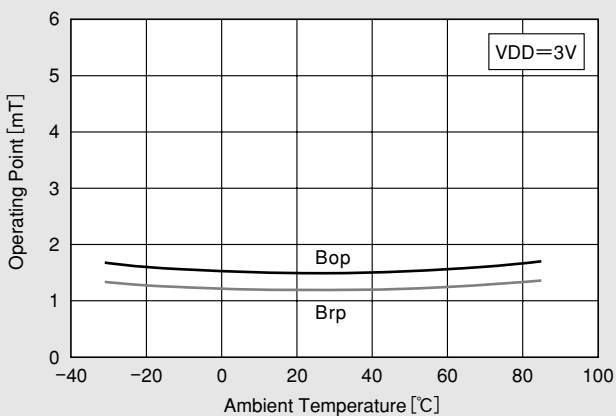
●Supply Voltage



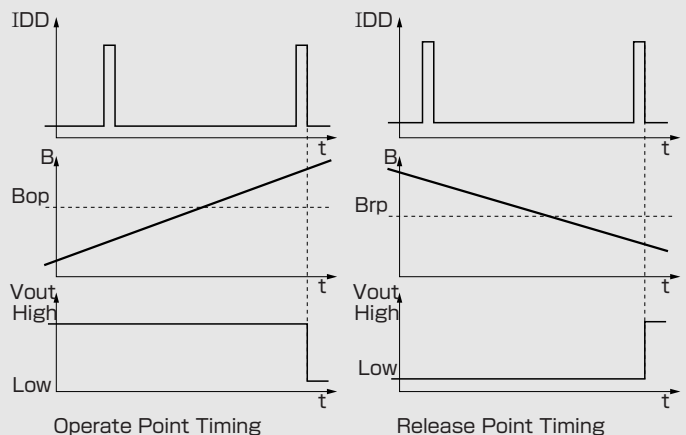
●IDD Pulse Driving (VDD=3V)



●Temperature Dependence of Bop, Brp



●Function Timing Chart



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