

# EW-6672

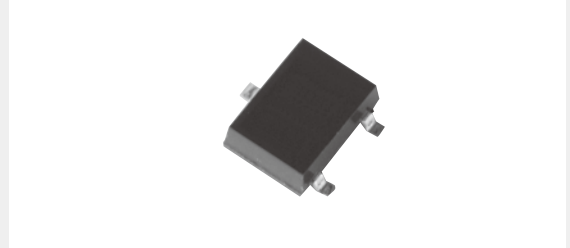
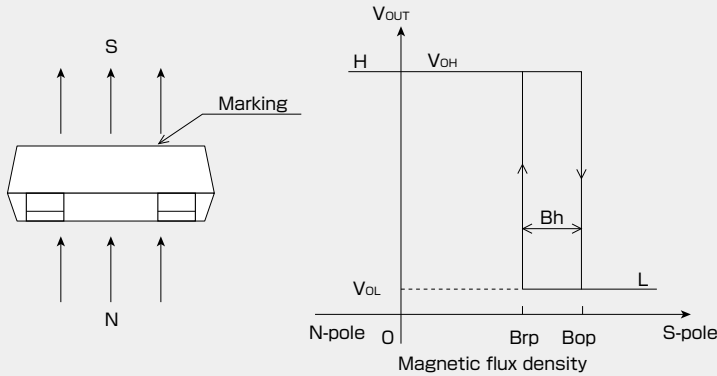
Shipped in packet-tape reel(3000pcs/Reel)

EW-6672 is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

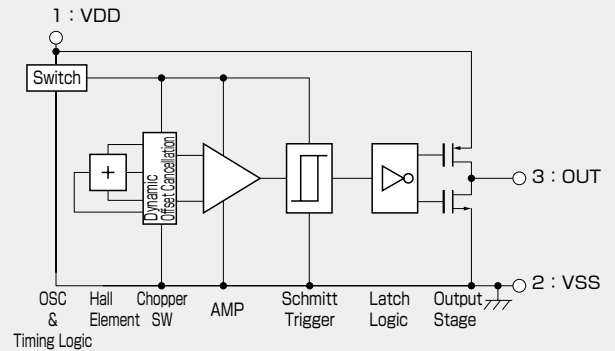
Unipolar Hall Effect Switch	Supply Voltage 2.4~3.3V	Hall Element Pulse Excitation	Ultra High Sensitivity Bop: 1.5mT	Output CMOS	SMT
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Notice:It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

## Operational Characteristics



## Functional Block Diagram



## Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Min.	Max.	Unit
Supply Voltage	VDD	-0.1	5.0	V
Output H Voltage	IOH	-1.0	+1.0	mA
Storage Temperature Range	TSTG	-40	+125	°C

## Recommended Operating Conditions

Item	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	VCC	2.4	3.0	3.3	V
Operating Temperature Range	Topr	-30	+25	+85	°C

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

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Operating Point	Bop		1.0*	1.5	2.3	mT
Releasing Point	Brp		0.8	1.2	1.9*	mT
Hysteresis	Bh		0.1*	0.3	0.6*	mT
Period	Tp			50	100	ms
Output High Voltage	VOH	IO=-1.0mA		VDD -0.4		V
Output Low Voltage	VOL	IO=+1.0mA			0.4	V
Supply Current	IDD	Average		5	10	μA

The characteristics with[\*] marks are design targets.

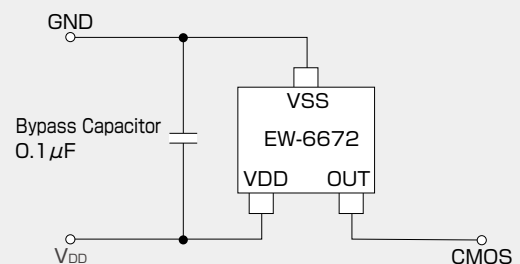
1 [mT] = 10 [Gauss]

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

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Operating Point	Bop		0.9	1.5	2.9	mT
Releasing Point	Brp		0.8	1.2	2.3	mT
Hysteresis	Bh		0.1	0.3	0.8	mT

Note) The above specifications are design targets.

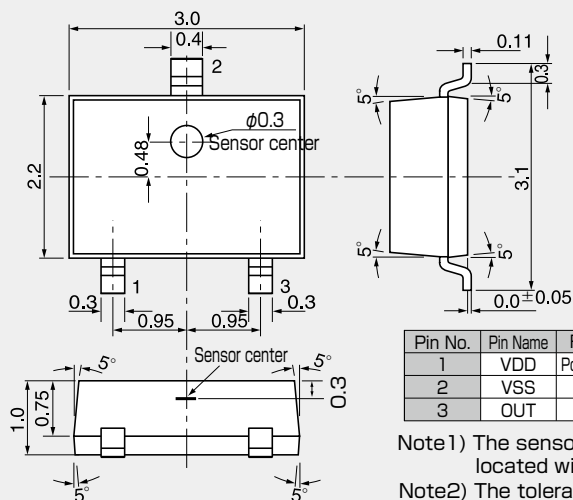
## Application Circuit



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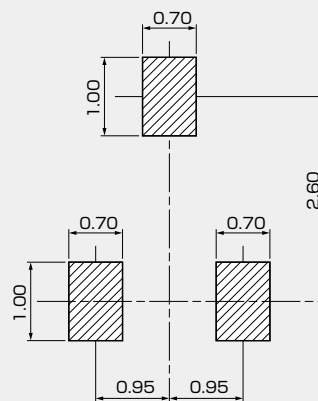
●Package (Unit:mm)



Pin No.	Pin Name	Function
1	VDD	Power Supply
2	VSS	Ground
3	OUT	Output

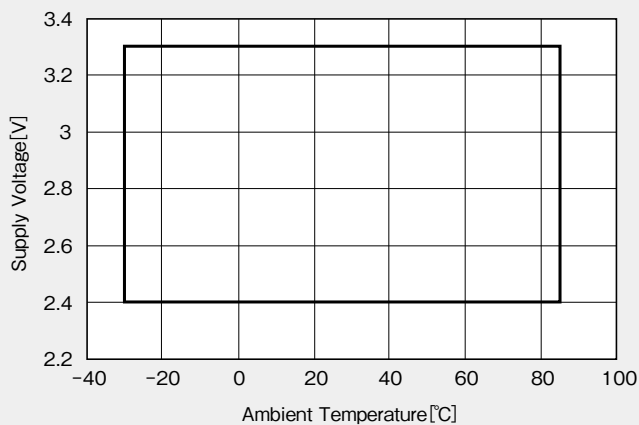
- Note1) The sensor center is located within the  $\phi 0.3$ mm circle.
- Note2) The tolerances of dimensions with no mentions is  $\pm 0.1$ mm.
- Note3) The sensor part is located 0.3mm(typ.) far from marking surface.

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

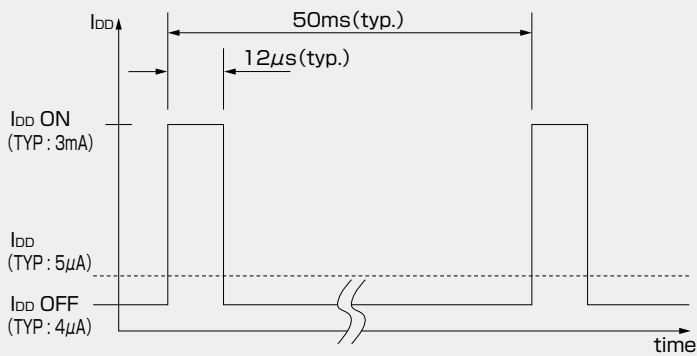


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●Supply Voltage

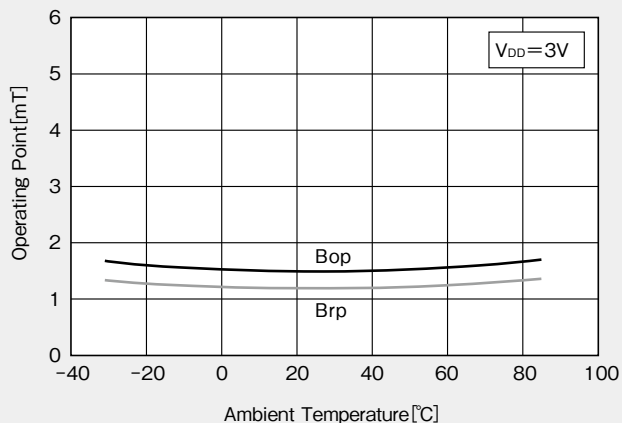


●IDD Pulse Driving ( $V_{DD}=3V$ )

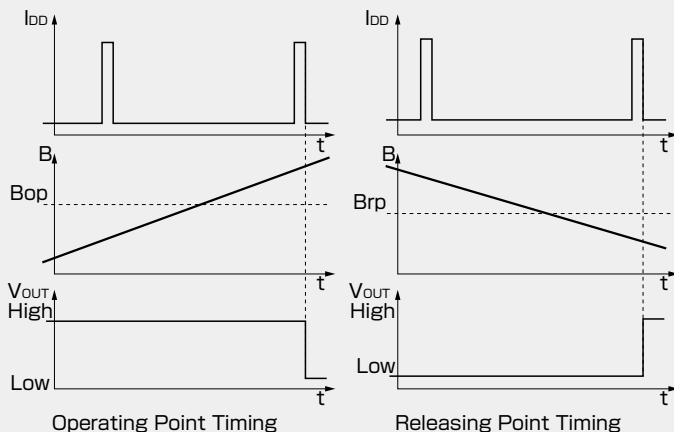


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●Temperature Dependence of Bop. Brp



●Function Timing Chart



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