

# EW-463

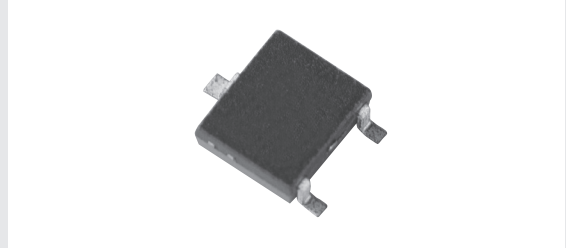
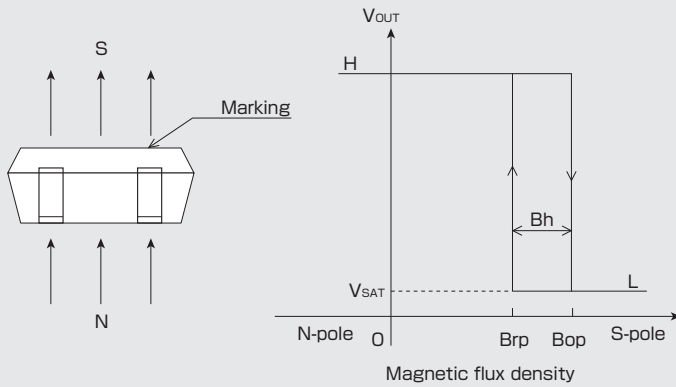
Shipped in packet-tape reel(5000pcs/Reel)

EW-463 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 2.5~5.5V	Hall Element Continuous Excitation	High Sensitivity Bop:3mT	Output Open Collector	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

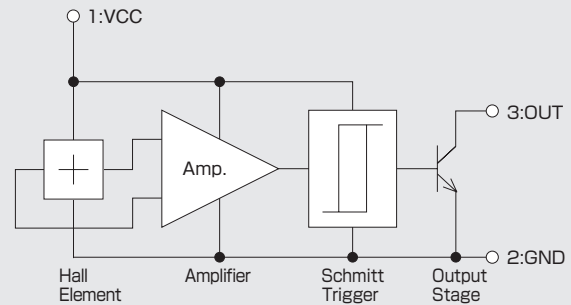


## ●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Min.	Max.	Unit
Supply Voltage	$V_{CC}$	-0.3	5.5 <sup>(*)</sup>	V
Output H Voltage	$V_{o(off)}$	-0.3	$V_{CC}$	V
Output L Current	$I_{SINK}$	0	15	mA
Storage Temperature Range	$T_{STG}$	-40	+125	°C

(\*) Please refer to Supply Voltage Derating Curve.

## ●Functional Block Diagram



## ●Recommended Operating Conditions

Item	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	$V_{CC}$	2.5	3	5.5	V
Operating Temperature Range	$T_{opr}$	-30	+25	+115	°C

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

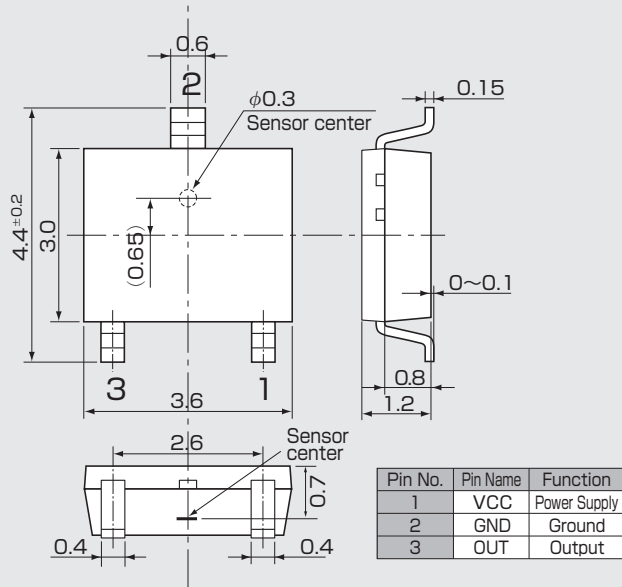
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Operating Point	Bop	$V_{CC}=3V$		3	6	mT
Releasing Point	Brp	$V_{CC}=3V$	0.5	2		mT
Hysteresis	Bh	$V_{CC}=3V$	0.2	1		mT
Output Saturation Voltage	$V_{SAT}$	$V_{CC}=3V, OUT="L", I_{SINK}=10mA$			0.4	V
Output Leakage Current	$I_{LEAK}$	$V_{CC}=3V, OUT="H", V_{OUT}=3V$			1	$\mu A$
Supply Current	$I_{CC}$	$V_{CC}=3V, OUT="H"$			8	mA

1 [mT] = 10 [Gauss]

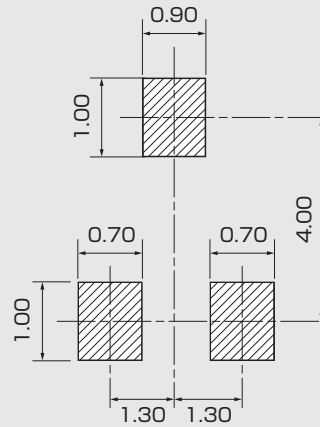
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a

●Package (Unit:mm)



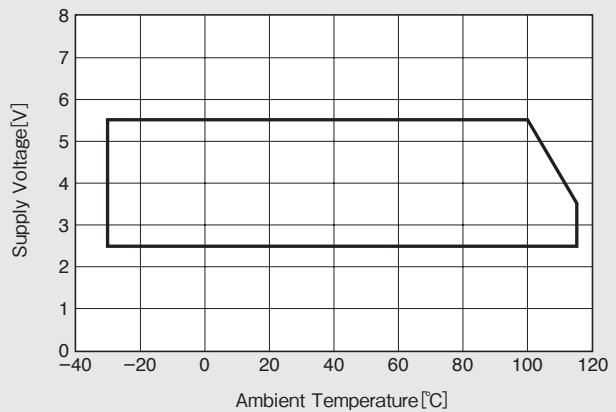
●(For reference only)Land Pattern (Unit:mm)



f

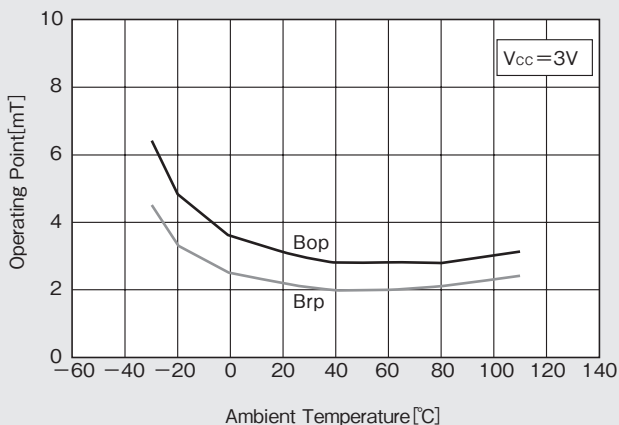
- Note1) The sensor center is located within the  $\phi 0.3\text{mm}$  circle.
- Note2) The tolerances of dimensions with no mentions is  $\pm 0.1\text{mm}$ .
- Note3) The sensor part is located  $0.7\text{mm}$ (typ.) far from marking surface.
- Note4) The metal portions on the package side (support lead) are connected to the internal circuits. The support lead should be isolate from the external circuit and the other support lead.

●Supply Voltage

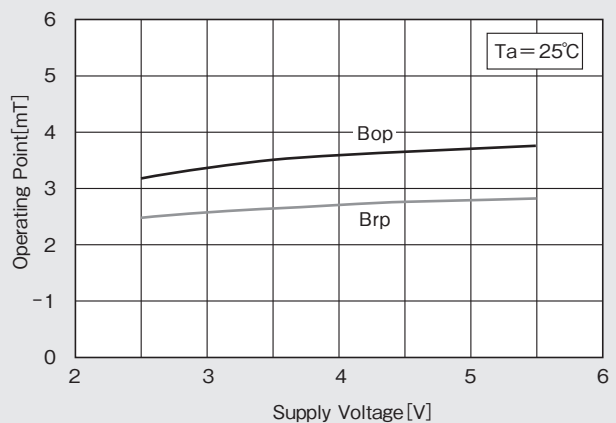


h

●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



o

p

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February 21, 2013

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