

# EW-414

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

EW-414 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 4.5~26.4V

Hall Element Continuous Excitation

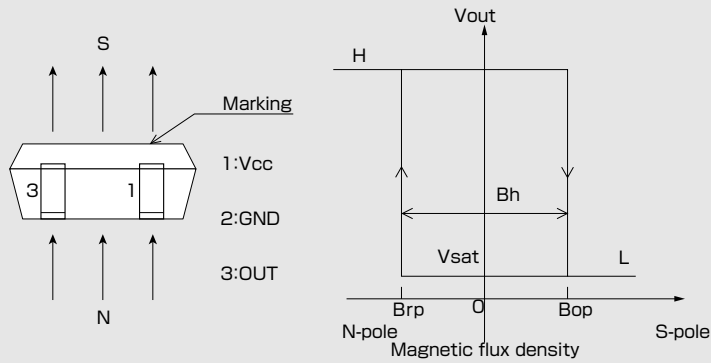
High Sensitivity Bop:3mT

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

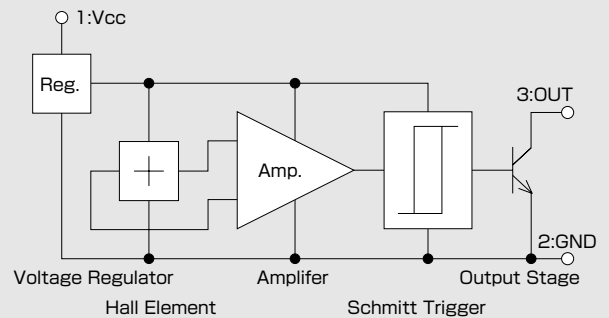


## ●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	$V_{CC}$	26.4 <sup>(*)</sup>	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



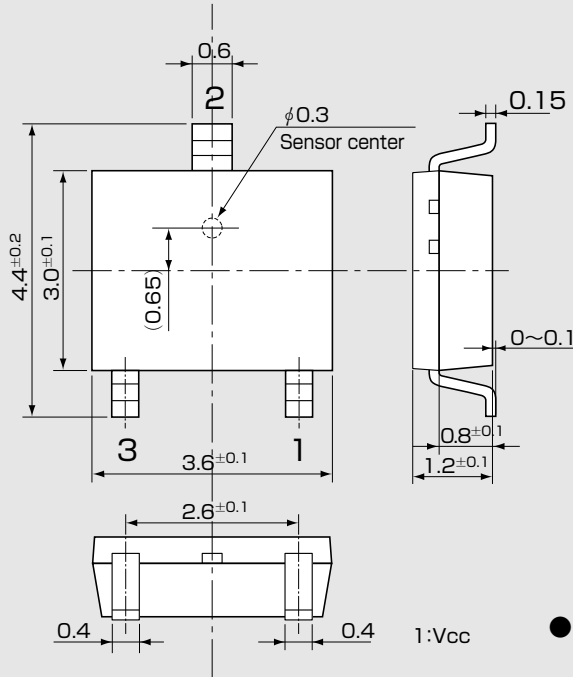
## ●Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	$V_{CC}$		4.5	24	26.4	V
Operating Point	$B_{OP}$	$V_{CC}=24V$	1		6	mT
Release Point	$B_{rp}$	$V_{CC}=24V$	-6		-1	mT
Hysteresis	$B_h$	$V_{CC}=24V$	2			mT
Output Saturation Voltage	$V_{sat}$	$V_{CC}=24V, OUT"L", I_{sink}=10mA$			0.4	V
Output Leakage Current	$I_{leak}$	$V_{CC}=24V, OUT"H", V_{out}=24V$			1	$\mu A$
Supply Current	$I_{CC}$	$V_{CC}=24V, OUT"H"$			8	mA

1 [mT]=10 [Gauss]

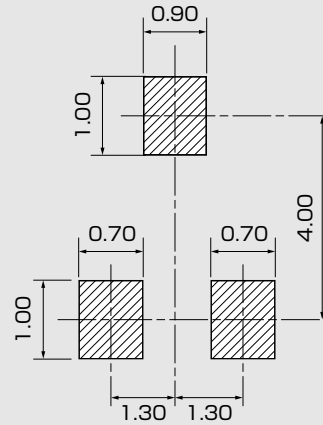
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●Package (Unit:mm)

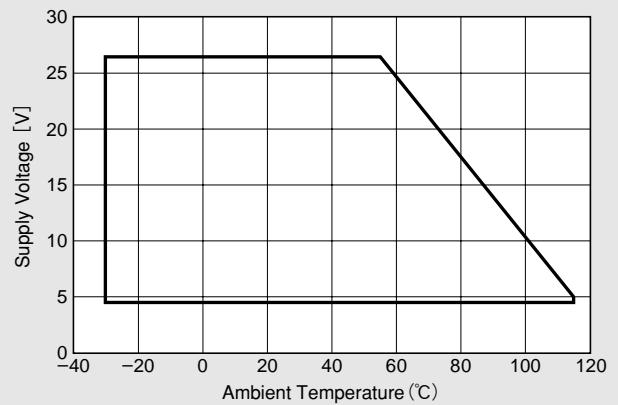


- Note 1) The sensor center is located within the  $\phi 0.3$ mm circle.
- Note 2) The metal portions on the package side (support lead) are connected to the internal circuits. The support lead should be isolate from the external circuit and the other support lead.

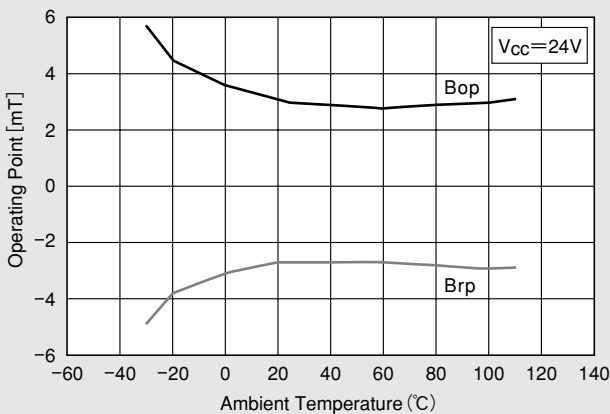
●(For reference only)Land Pattern (Unit:mm)



●Supply Voltage



●Temperature Dependence of Bop, Brp



## IMPORTANT NOTICE

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March 14, 2012