

EW-453

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

EW-453 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

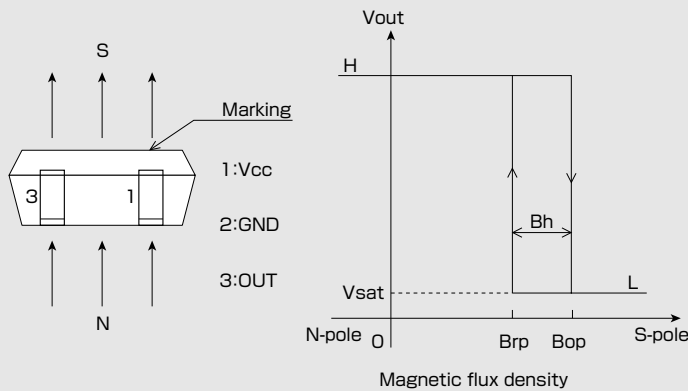
Low Sensitivity
Bop: 10mT

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

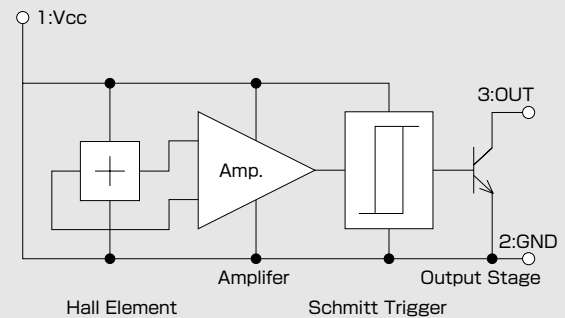


●Absolute Maximum Ratings (Ta=25°C)

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



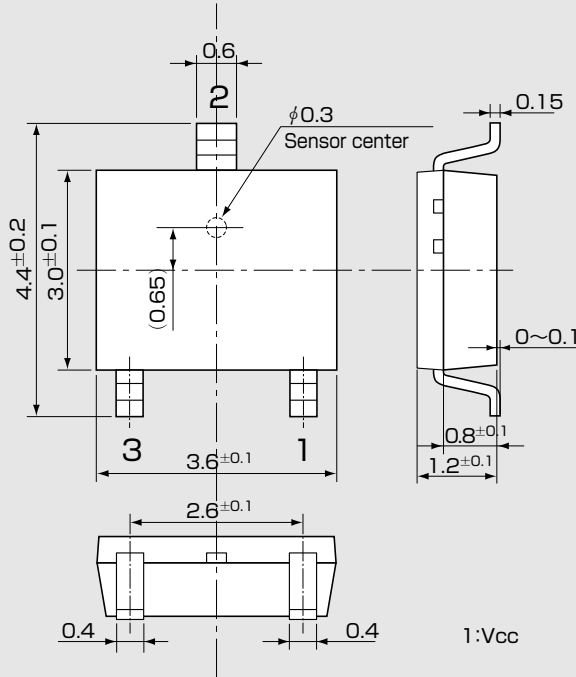
●Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	V_{CC}		2.5	3	5.5	V
Operating Point	B_{OP}	$V_{CC}=3V$			20	mT
Release Point	B_{rp}	$V_{CC}=3V$	5			mT
Hysteresis	B_h	$V_{CC}=3V$	1.5			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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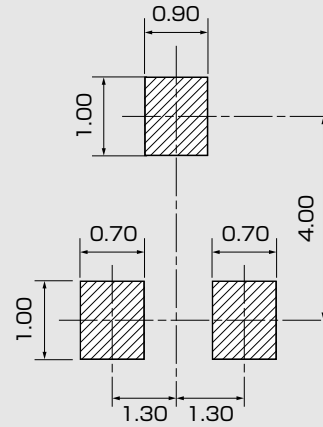
●Package (Unit:mm)



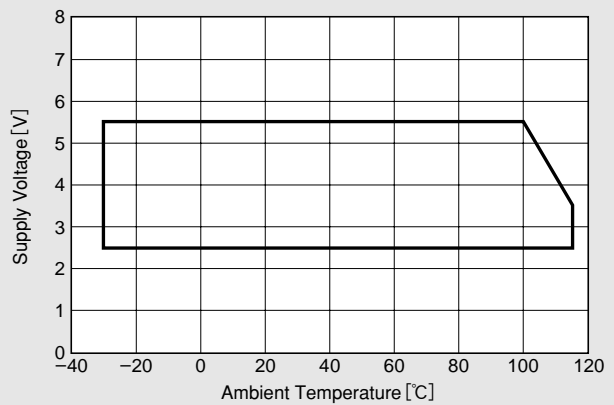
Note1) The sensor center is located within the φ0.3mm circle.
 Note2) The metal portions on the package side (support lead) are connected to the internal circuits. The support lead should be isolate from the external circuit and the other support lead.

1:Vcc
 2:GND
 3:OUT

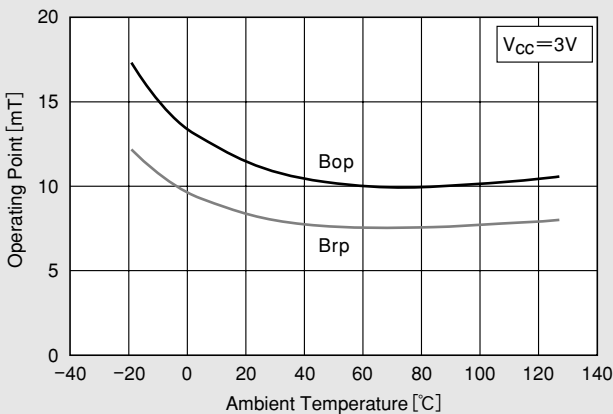
●(For reference only)Land Pattern (Unit:mm)



●Supply Voltage



●Temperature Dependence of Bop. Brp



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April 4, 2012