

EW-453

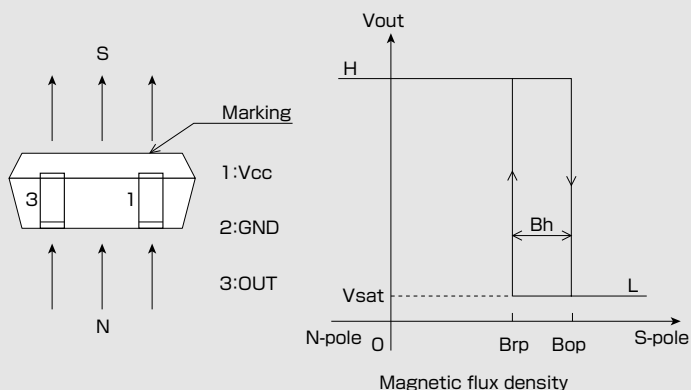
Shipped in packet-tape reel(5000pcs/Reel)

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
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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

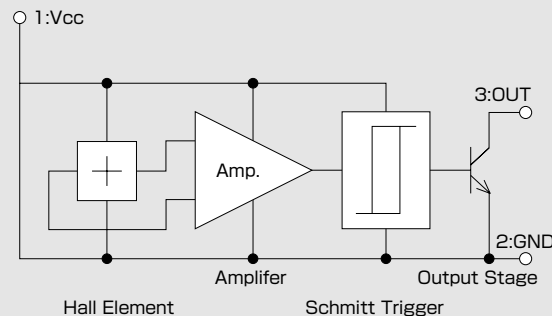


●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	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



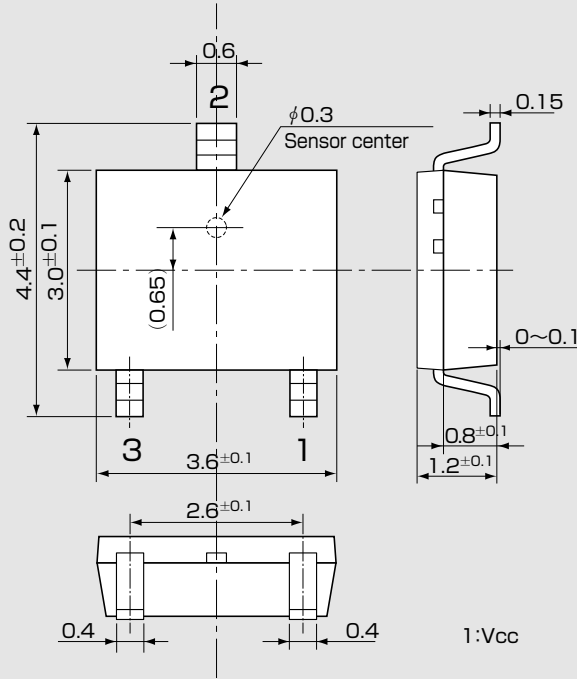
●Magnetic and Electrical Characteristics (Ta=25°C)

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

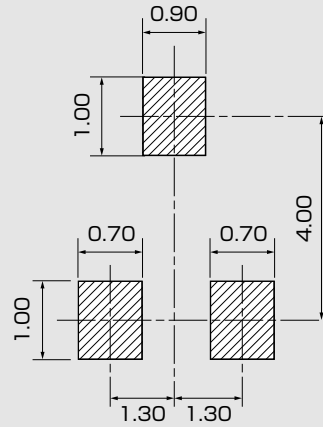
1 [mT] = 10 [Gauss]

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●Package (Unit:mm)



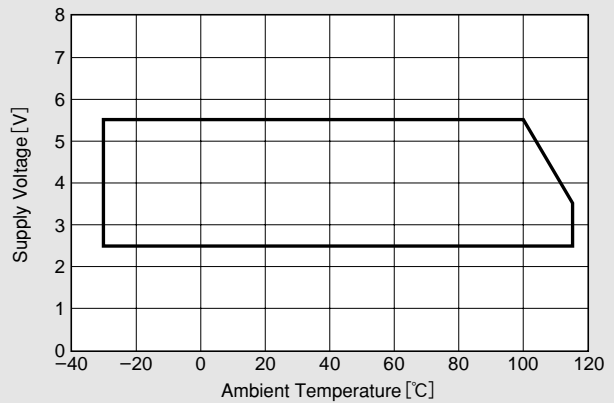
●(For reference only)Land Pattern (Unit:mm)



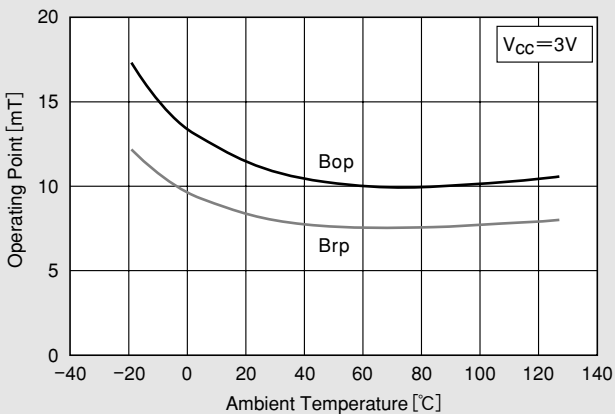
Note) The sensor center is located within the $\phi 0.3$ mm circle.

- 1:Vcc
- 2:GND
- 3:OUT

●Supply Voltage



●Temperature Dependence of Bop. Brp



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