



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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EW-450B

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

EW-450B 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
3~26.4V

Hall Element
Continuous
Excitation

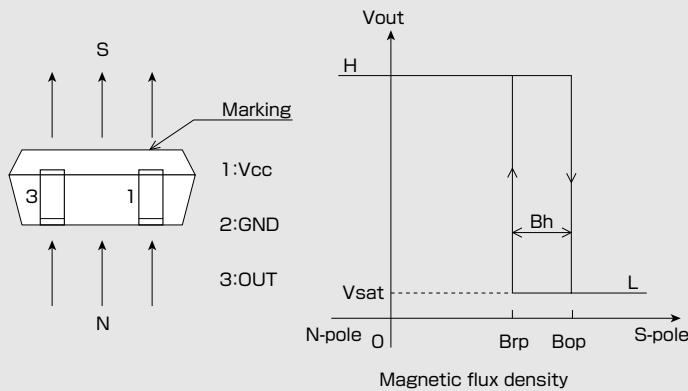
Standard Sensitivity
Bop:6mT

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

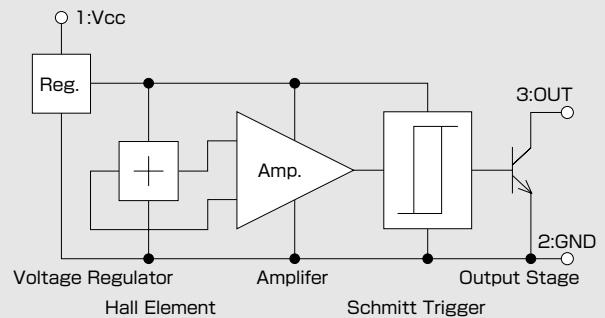


●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	V_{CC}	26.4(*)	V
Output H Voltage	$V_{O(off)}$	V_{CC}	V
Output L Current	I_{sink}	10	mA
Operating Temperature Range	T_{opr}	-40 ~ 115	°C
Storage Temperature Range	T_{stg}	-40 ~ 125	°C

(*) Please refer to Supply Voltage Derating Curve.

●Functional Block Diagram



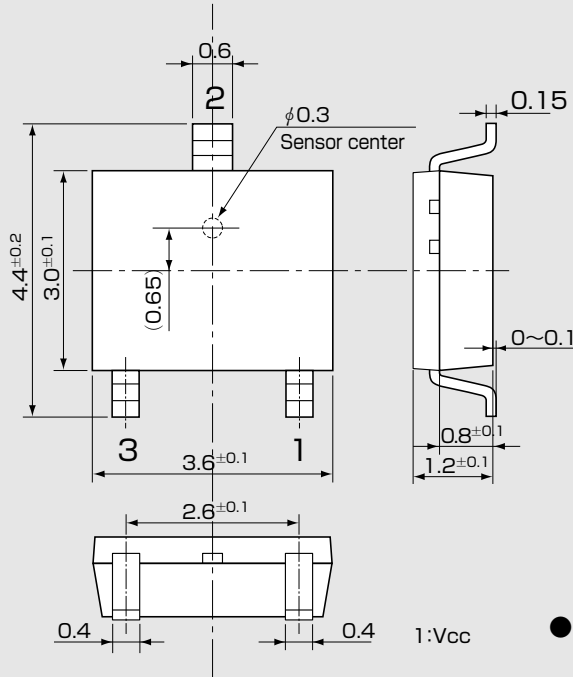
●Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	V_{CC}		3	12	26.4	V
Operating Point	B_{OP}	$V_{CC}=12V$	3	6	10	mT
Release Point	B_{rp}	$V_{CC}=12V$	2.5	5	9.5	mT
Hysteresis	B_h	$V_{CC}=12V$	0.5	1.1	2.5	mT
Output Saturation Voltage	V_{sat}	$V_{CC}=12V, OUT="L", I_{sink}=10mA$			0.4	V
Output Leakage Current	I_{leak}	$V_{CC}=12V, OUT="H", V_{out}=12V$			1	μA
Supply Current	I_{CC}	$V_{CC}=12V, OUT="H"$		5	6	mA

1 [mT] = 10 [Gauss]

•Please be aware that our products are not intended for use in life support equipment, devices, or systems. Use of our products in such applications requires the advance written approval of our sales staff. Certain applications using semiconductor devices may involve potential risks of personal injury, property damage, or loss of life. In order to minimize these risks, adequate design and operating safeguards should be provided by the customer to minimize inherent or procedural hazards. Inclusion of our products in such applications is understood to be fully at the risk of the customer using our devices or systems.

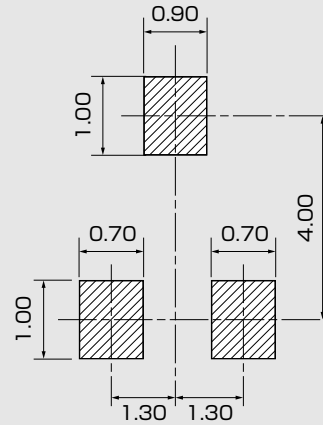
●Package (Unit:mm)



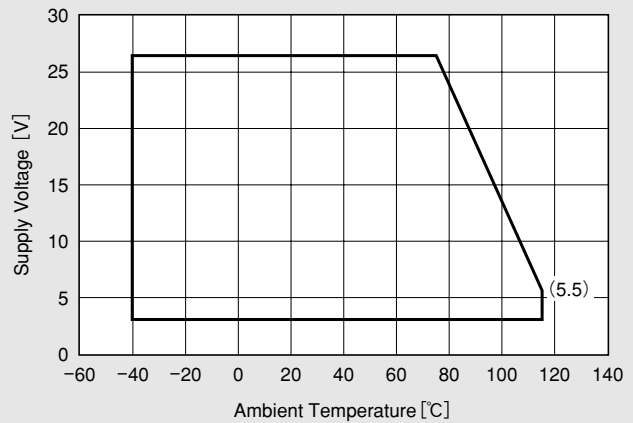
Note) The sensor center is located within the $\phi 0.3$ mm circle.

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

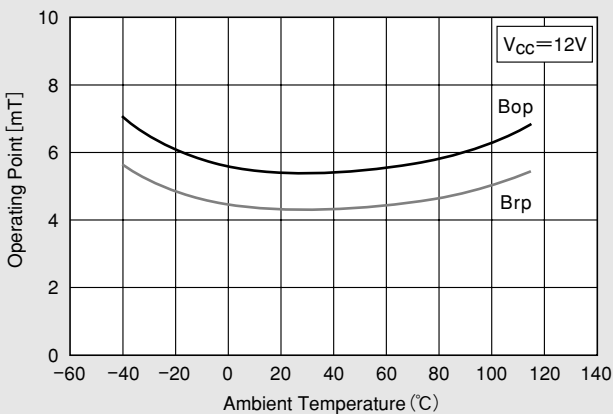
●(For reference only)Land Pattern (Unit:mm)



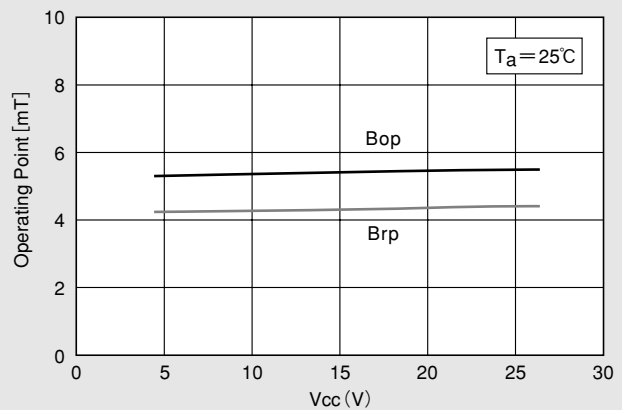
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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June 2, 2010