

EW-650B

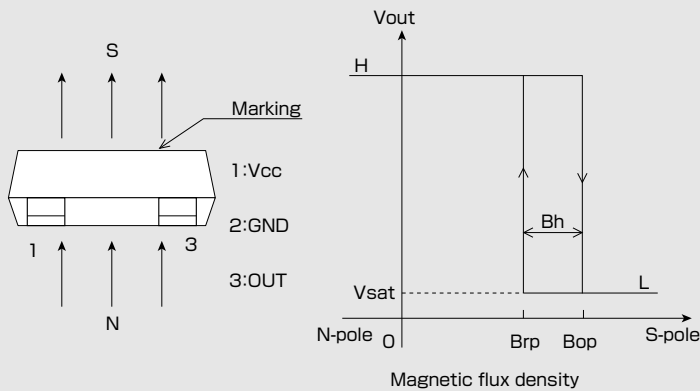
Shipped in packet-tape reel(3000pcs/Reel)

EW-650B 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
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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

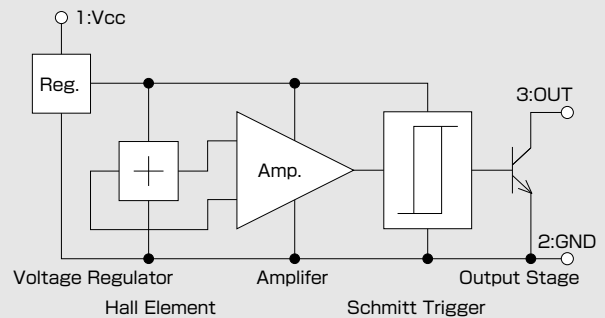


Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	V_{CC}	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



Another product type with pulled-up resistor(EW-652B). Please contact AKM to obtain the detail information.

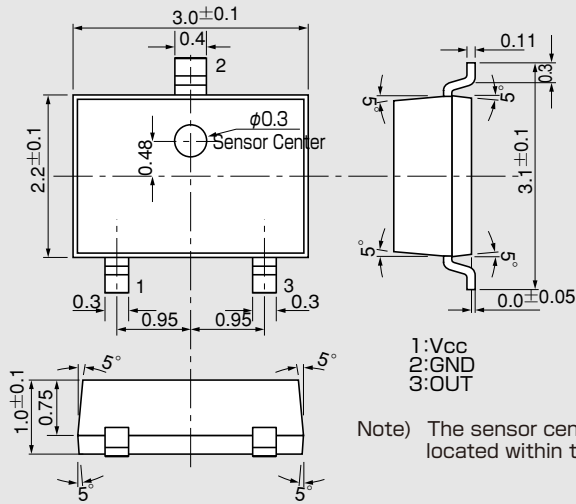
Magnetic and Electrical Characteristics (Ta=25°C)

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]

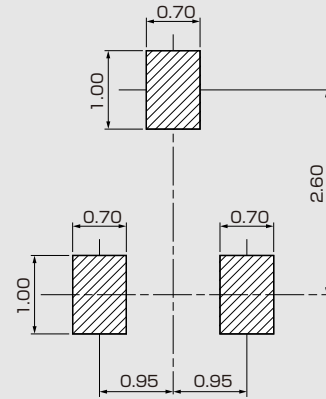
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●Package (Unit:mm)

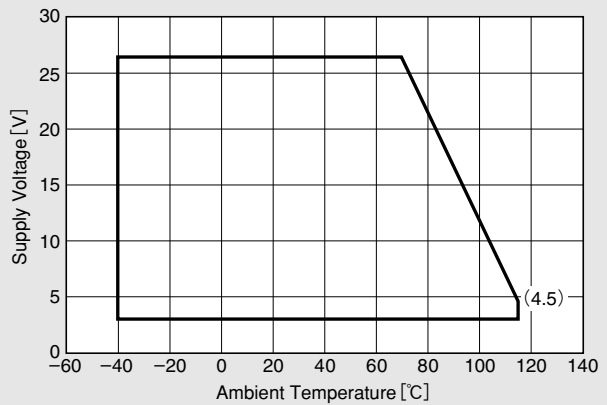


Note) The sensor center is located within the φ0.3mm circle.

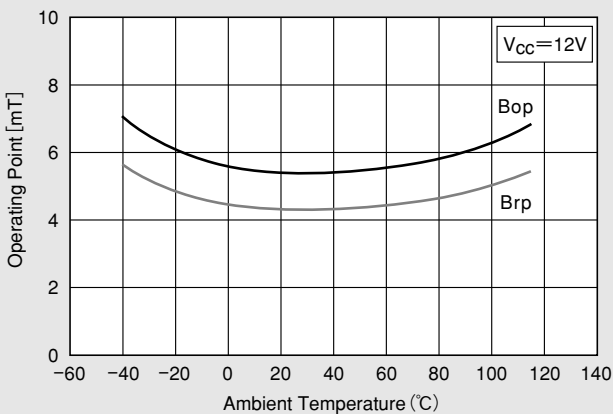
●(For reference only)Land Pattern (Unit:mm)



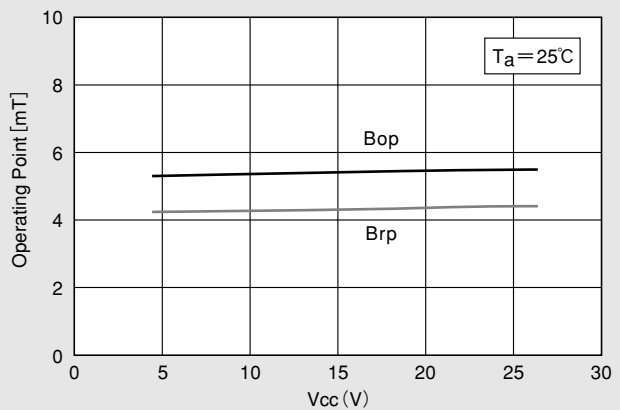
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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October 8, 2010