

# EW-610B

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

EW-610B is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

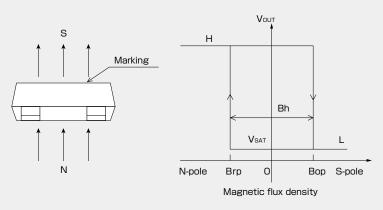
Bipolar Hall Effect Latch Supply Voltage 3~26.4V

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)

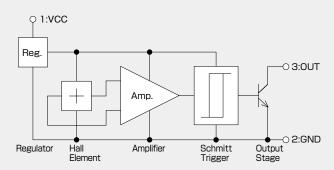
Item	Symbol	Min.	Max.	Unit	
Supply Voltage	Vcc	-0.3	26.4*	٧	
Output H Voltage	Vo(off)	-0.3	Vcc	V	
Output L Current	Isink	0	10	mA	
Storage Temperature Range	Тѕтс	-40	+125	°C	

 $<sup>(*) \ \</sup>mathsf{Please} \ \mathsf{refer} \ \mathsf{to} \ \mathsf{Supply} \ \mathsf{Voltage} \ \mathsf{Derating} \ \mathsf{Curve}.$ 

#### Recommended Operating Conditions

Item	Symbol	Min.	Тур.	Max.	Unit
Supply Voltage	Vcc	3	12	26.4	٧
Operating Temperature Range	Topr	-40	+25	+115	ပ

#### ●Functional Block Diagram



Another product type with pulled-up resistor (EW-612B). Please contact AKM to obtain the detail information.

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

Item	Symbol	Conditions	Min.	Тур.	Max.	Unit
Operating Point	Вор	Vcc=12V	1	3	6	mT
Releasing Point	Brp	Vcc=12V	-6	-3	-1	mT
Hysteresis	Bh	Vcc=12V	2	6		mT
Output Saturation Voltage	VSAT	Vcc=12V,OUT"L",Isink =10mA			0.4	٧
Output Leakage Current	ILEAK	Vcc=12V,OUT"H",VouT=12V			1	μΑ
Supply Current	Icc	Vcc=12V,OUT"H"		5	6	mA

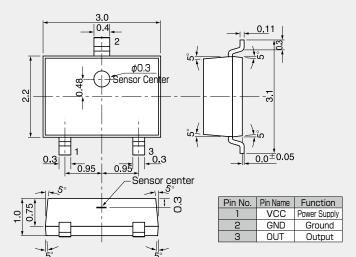
1 [mT] =10 [Gauss]

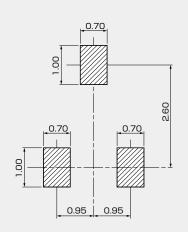
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### ●Package (Unit:mm)

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



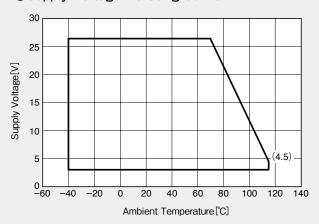


Note 1) The sensor center is located within the  $\phi$ 0.3mm circle.

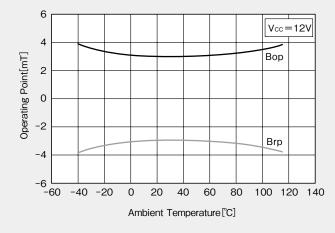
Note2) The tolerances of dimensions with no mentions is  $\pm 0.1$  mm.

Note3) The sensor part is located 0.3mm(typ.) far from marking surface.

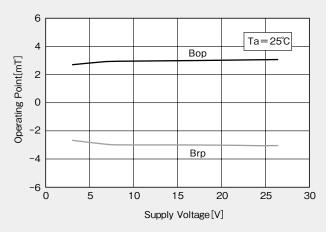
### Supply Voltage Derating Curve



#### ●Temperature Dependence of Bop. Brp



#### Supply Voltage Dependence of Bop. Brp



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