

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-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

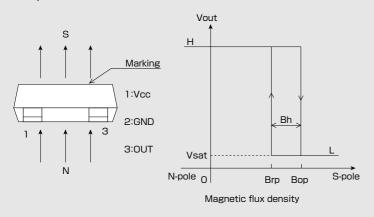
Hall Element Continuous Excitation Standard Sensitivity
Bop:6mT

Output
Open Collector

SMT

Notice: It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

#### Operational Characteristics



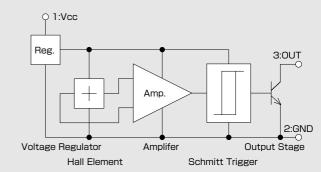


## ● Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit		
Supply Voltage	V <sub>cc</sub>	26.4**	V		
Output H Voltage	V <sub>o(off)</sub>	V <sub>cc</sub>	٧		
Output L Current	Isink	10	mA		
Operating Temperature Range	Topr	−40 ~ 115	°C		
Storage Temperature Range	Tstg	−40 ~ 125	°C		

 $<sup>(\</sup>ensuremath{\boldsymbol{\ast}})$  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.	Тур.	Max.	Unit
Supply Voltage	V <sub>CC</sub>		3	12	26.4	٧
Operating Point	B <sub>OP</sub>	V <sub>CC</sub> =12V	3	6	10	mT
Release Point	B <sub>rp</sub>	V <sub>CC</sub> =12V	2.5	5	9.5	mT
Hysteresis	Bh	V <sub>CC</sub> =12V	0.5	1.1	2.5	mT
Output Saturation Voltage	V <sub>sat</sub>	V <sub>CC</sub> =12V,OUT"L",I <sub>Sink</sub> =10mA			0.4	٧
Output Leakage Curren	I <sub>leak</sub>	V <sub>CC</sub> =12V,OUT"H",V <sub>OUt</sub> =12V			1	μΑ
Supply Current	$I_{CC}$	V <sub>CC</sub> =12V,OUT"H"		5	6	mA

1 [mT] =10 [Gauss]

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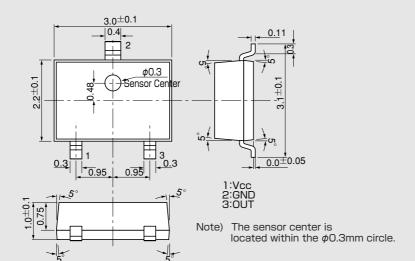
•Please be aware that our products are not intended for use in life support equipment, devices, or systems. Use of our products in such applications requires the

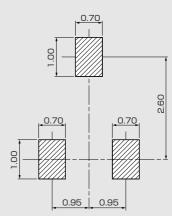
devance written approval of our sales staff.

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.

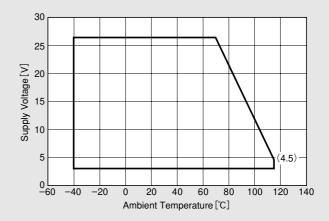
# ●Package (Unit:mm)

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

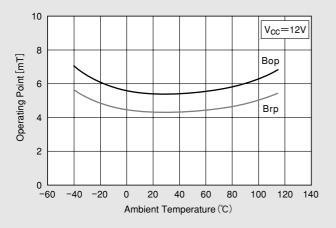




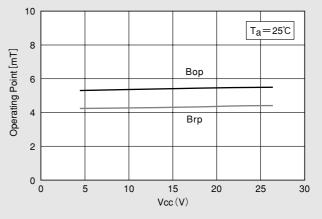
# Supply Voltage



# ●Temparature Dependence of Bop. Brp



# Supply Voltage Dependence of Bop. Brp



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