

# EZ-410

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

EZ-410 is composed of an InAs Hall Element and a signal processing IC chip in a package

Bipolar Hall Effect Latch

Supply Voltage 3.8~24V

Hall Element Continuous Excitation

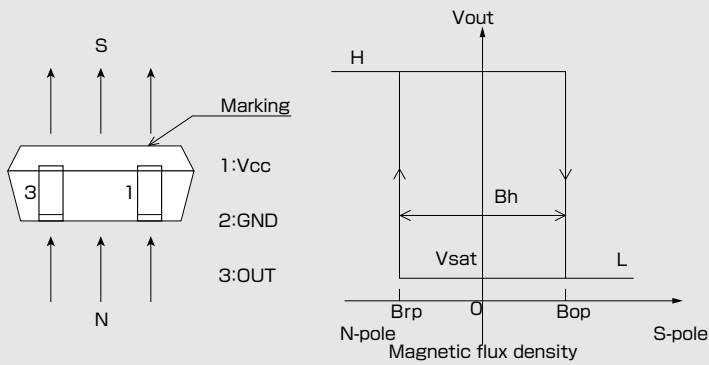
Standard Sensitivity Bop:5mT

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

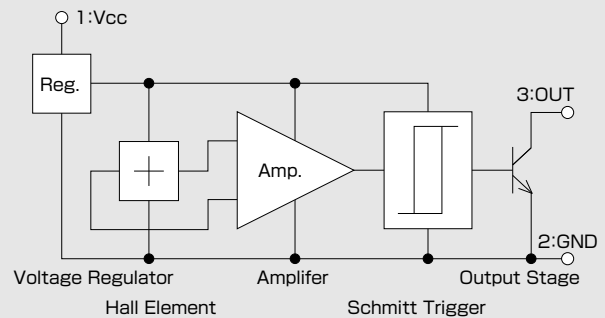


## ●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Limit	Unit
Supply Voltage	$V_{CC}$	24 <sup>(*)</sup>	V
Output H Voltage	$V_{O(off)}$	$V_{CC}$	V
Output L Current	$I_{sink}$	10	mA
Operating Temperature Range	$T_{opr}$	-40 ~ 125	°C
Storage Temperature Range	$T_{stg}$	-40 ~ 150	°C

(\*) Please refer to Supply Voltage Derating Curve.

## ●Functional Block Diagram



## ●Electrical Characteristics① (Ta=25°C, Vcc=12V)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Supply Voltage	$V_{CC}$		3.8	12	24	V
Output Leakage Current	$I_{leak}$	OUT="H"			1	$\mu A$
Output Saturation Voltage	$V_{sat}$	OUT="L", $I_{out}=10mA$			0.4	V
Supply Current	$I_{cc}$	OUT="H"		5	9	mA

## ●Electrical Characteristics② (Ta=-40~125°C, Vcc=3.8~24V)

項目	記号	測定条件	最小	標準	最大	単位
Supply Voltage	$V_{CC}$		3.8	12	24 <sup>(*)</sup>	V
Output Leakage Current	$I_{leak}$	OUT="H"			10	$\mu A$
Output Saturation Voltage	$V_{sat}$	OUT="L"			0.8	V
Supply Current	$I_{cc}$	OUT="H"		5	9	mA

(\*) Please refer to Supply Voltage Derating Curve.

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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
- This product contains gallium arsenide(GaAs).Handling and discarding precautions required.

●Magnetic Characteristics① (Ta=25°C, Vcc=12V)

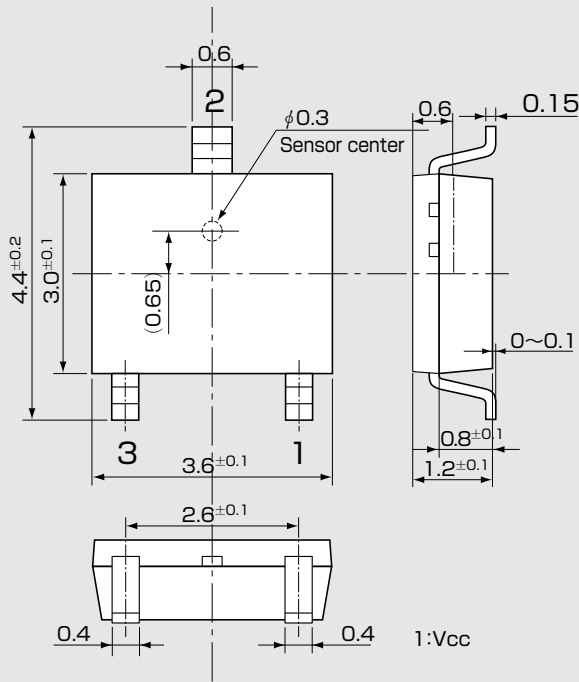
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Operating Point	B <sub>op</sub>		1	4.2	7.5	mT
Release Point	B <sub>rp</sub>		-7.5	-4.2	-1	mT
Hysteresis	B <sub>h</sub>		2	8.4	15	mT

●Magnetic Characteristics② (Ta=-40~125°C, Vcc=3.8~24V)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Operating Point	B <sub>op</sub>		0.5	4.2	8.5	mT
Release Point	B <sub>rp</sub>		-8.5	-4.2	-0.5	mT
Hysteresis	B <sub>h</sub>		1	8.4	17	mT

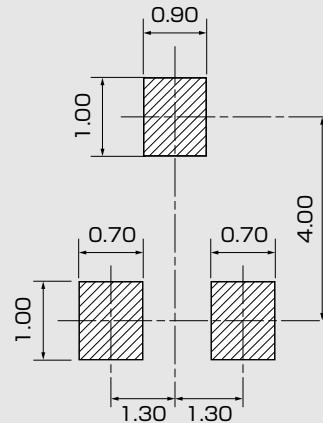
(\*) Please refer to Supply Voltage Derating Curve.

●Package (Unit:mm)

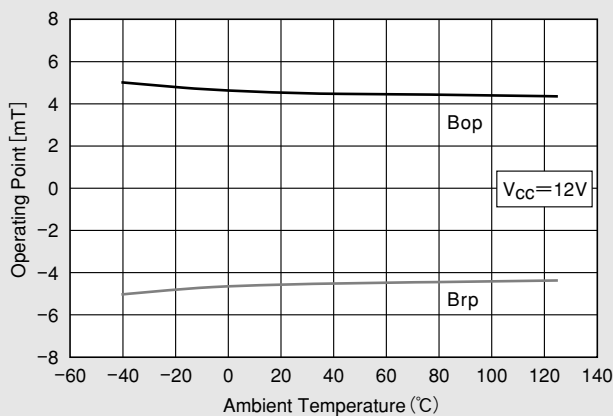


Note) The sensor center is located within the φ0.3mm circle.

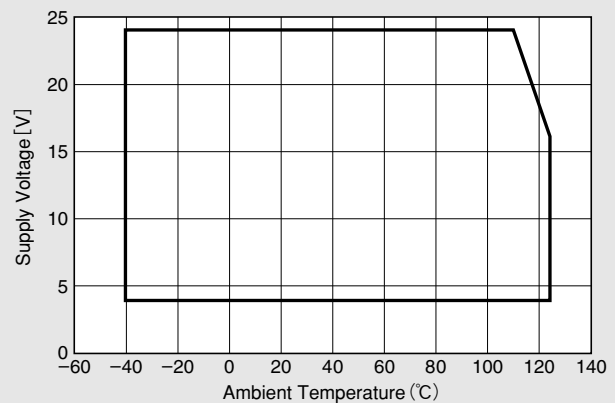
●(For reference only)Land Pattern (Unit:mm)



●Temperature Dependence of Bop, Brp



●Supply Voltage



## IMPORTANT NOTICE

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October 8, 2010