

EW-410, EW-510

BIPOLAR HALL EFFECT LATCHES

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

ASAHI HALL EFFECT ICs

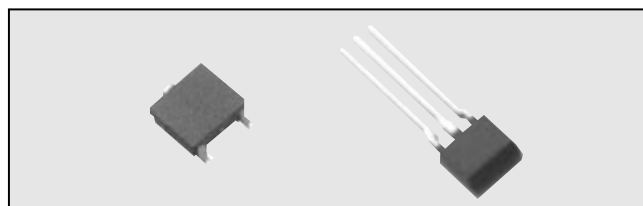
ASAHI KASEI ELECTRONICS Hall Effect ICs are composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package. ASAHI KASEI ELECTRONICS Hall Effect ICs have high sensitivity and good stability.

FEATURES

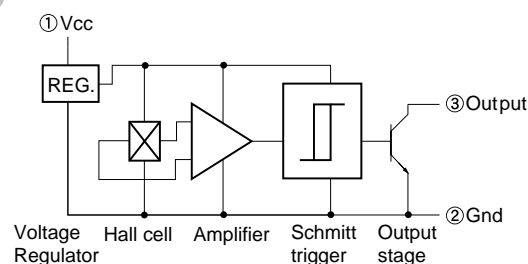
- High Sensitivity (Bop:1mT to 6mT)
- 4.5V to 18V Operation
- Highly Resistant to Mechanical Stress
- Stable Operation in Broad Temperature Range
- Compact Size
- Open Collector

APPLICATIONS

- Rotor Position Sensor for Precision Motors.
- Stroke Sensor
- Proximity Switch
- Encoder
- Current Switch
- etc.



FUNCTIONAL BLOCK DIAGRAM

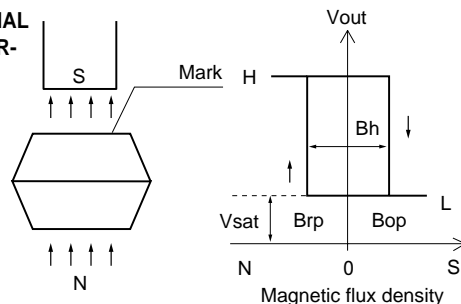


ABSOLUTE MAXIMUM RATINGS(Ta = 25 °C)

| Item | Symbol | Limit | Unit |
|-----------------------------|---------|--------------|------|
| Supply Voltage *1 | Vcc | 18 | V |
| Output "OFF" Voltage | Vo(off) | 18 | V |
| Output "ON" Current | I sink | 15 | mA |
| Operating Temperature Range | Topr | - 30 ~ + 115 | |
| Storage Temperature Range | Tstg | - 40 ~ + 125 | |

* 1:Please refer to(Fig 1) DERATING CURVE "

OPERATIONAL CHARACTERISTICS



ELECTRICAL CHARACTERISTICS(Ta = 25 °C, Vcc = 4.5 ~ 18V DC.)

| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|---------------------------|--------|------------------------|------|------|------|------|
| Operate Point | Bop | Vcc=12V | 1 | | 6 | mT |
| Release Point | Brp | Vcc=12V | - 6 | | - 1 | mT |
| Hysteresis | Bh | | 2 | | | mT |
| Output Saturation Voltage | Vsat | Output"L", I sink=10mA | | | 0.4 | V |
| Supply Current | I cc | Output"H", Vcc=12V | | | 8 | mA |
| Output Leakage Current | I leak | Output"H", Vo=12V | | | 1 | μ A |

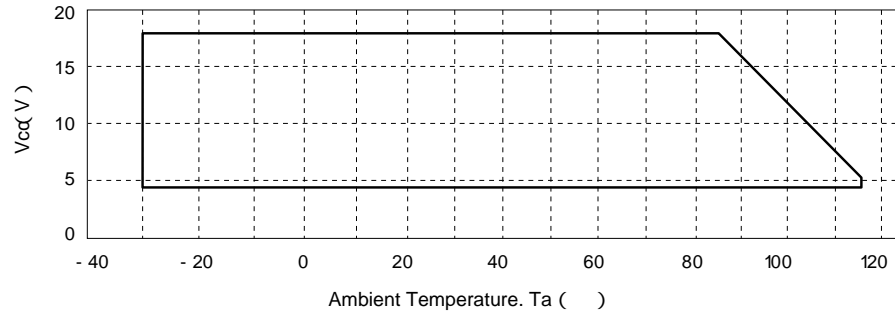
1 mT = 10 Gauss

Please be aware that AKE products are not intended for use in life support appliances, devices, or systems. Use of AKE products in such applications requires the written approval of the appropriate AKE officer. 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 AKE products in such applications is understood to be fully at the risk of the customer using AKE devices or systems.

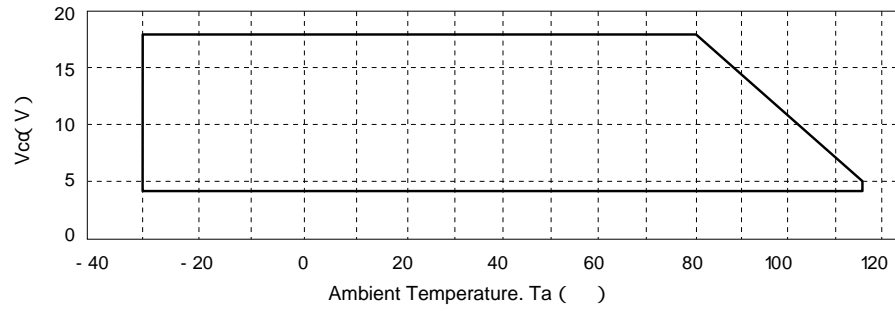
SUPPLY VOLTAGE DERATING CURVE

(Fig . 1)

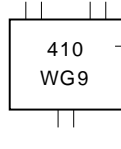
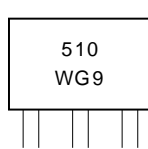
EW-510



EW-410



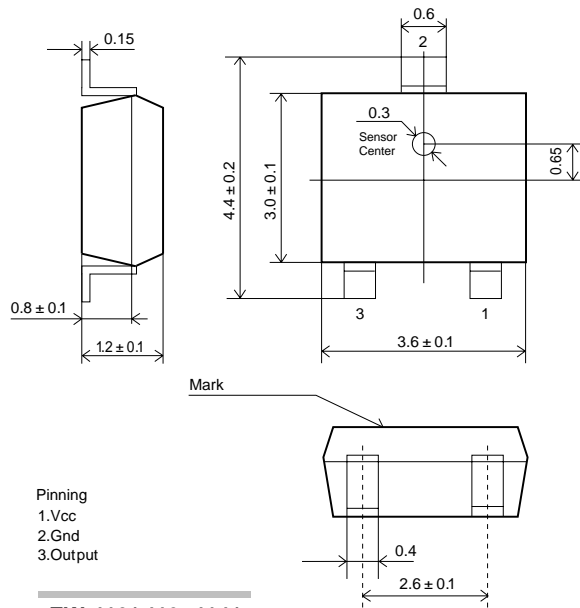
MARK AND SUPPLY STYLE



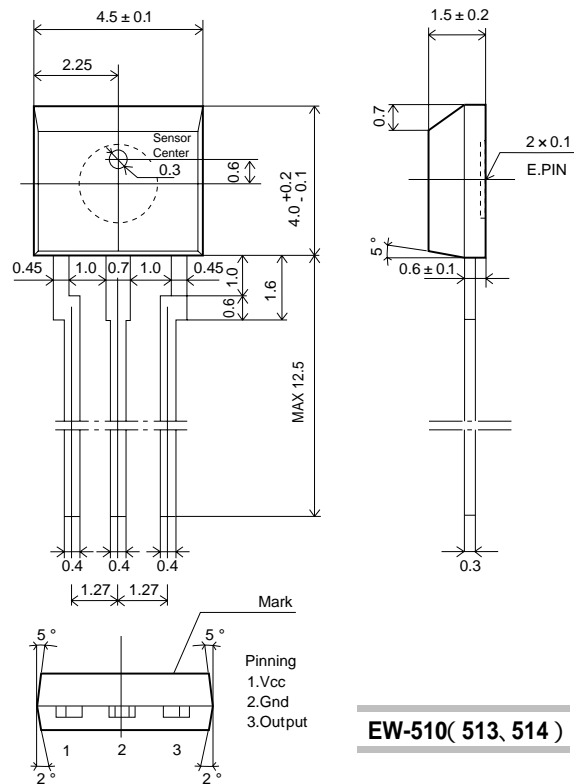
TYPE NO.

Supplied by
EW-510:500pcs. / Pack.
EW-410:5000pcs. / Reel

PACKAGE [Unit : mm]



EW-410(413, 414)



EW-510(513, 514)