

EW-460, EW-560

UNIPOLAR HALL EFFECT SWITCHES

ASAHI HALL EFFECT ICs

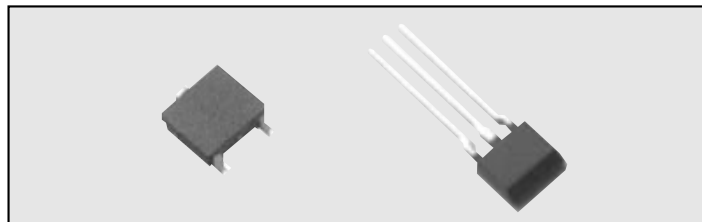
ASAHI KASEI ELECTRONICS Hall Effect ICs are composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package. ASAHI KASEI ELECTRONICS Hall Effect ICs have high sensitivity and good stability.

FEATURES

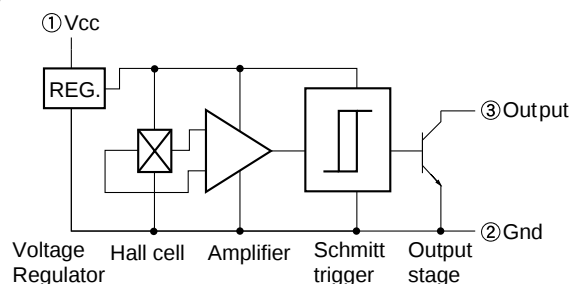
- Bop(max): 6mT
- 4.5V to 18V Operation
- Highly Resistant to Mechanical Stress
- Stable Operation in Broad Temperature Range
- Compact Size
- Open Collector

APPLICATIONS

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



FUNCTIONAL BLOCK DIAGRAM

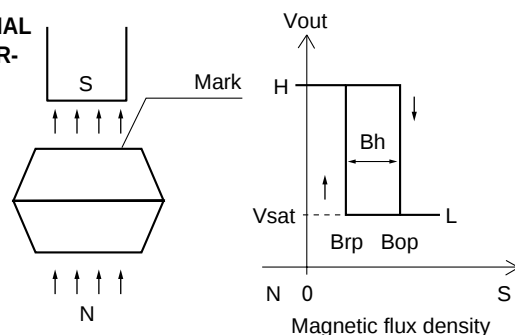


ABSOLUTE MAXIMUM RATINGS(Ta = 25 °C)

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			6	mT
Release Point	Brp	Vcc=12V	0.5			mT
Hysteresis	Bh		0.2			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	μA

1mT = 10 Gauss

(Fig . 1)

The graph shows the relationship between Vcc (V) and Ambient Temperature. Ta (°C). The Vcc is constant at 18V for temperatures from -30°C to 85°C. Above 85°C, Vcc decreases linearly to 5V at 125°C.

Ambient Temperature. Ta (°C)	Vcc (V)
-30	18
85	18
125	5

The graph shows the relationship between Vcc (V) and Ambient Temperature. Ta (°C). The Vcc is constant at 18V for temperatures from -30°C to 80°C. Above 80°C, Vcc decreases linearly to 5V at 120°C.

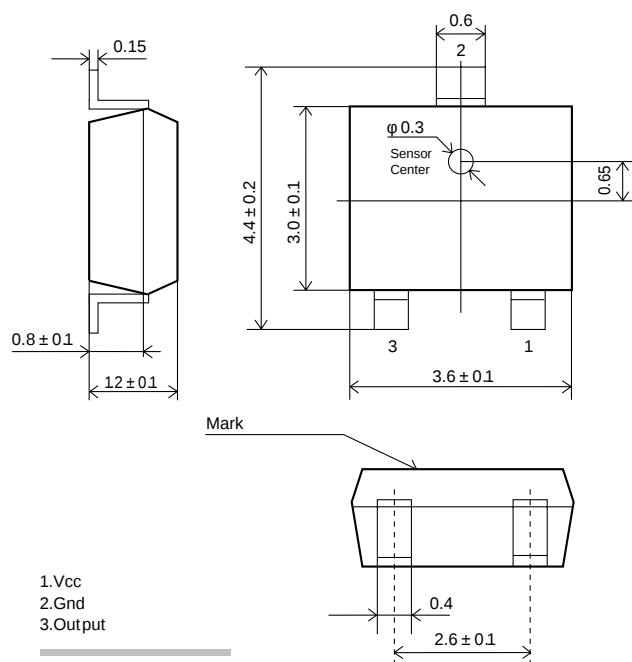
Ambient Temperature. Ta (°C)	Vcc (V)
-30	18
80	18
120	5

Diagram showing two types of WG9 components:

- 560 WG9 (Component with 4 pins)
- 460 WG9 (Component with 3 pins, labeled TYPE NO.)

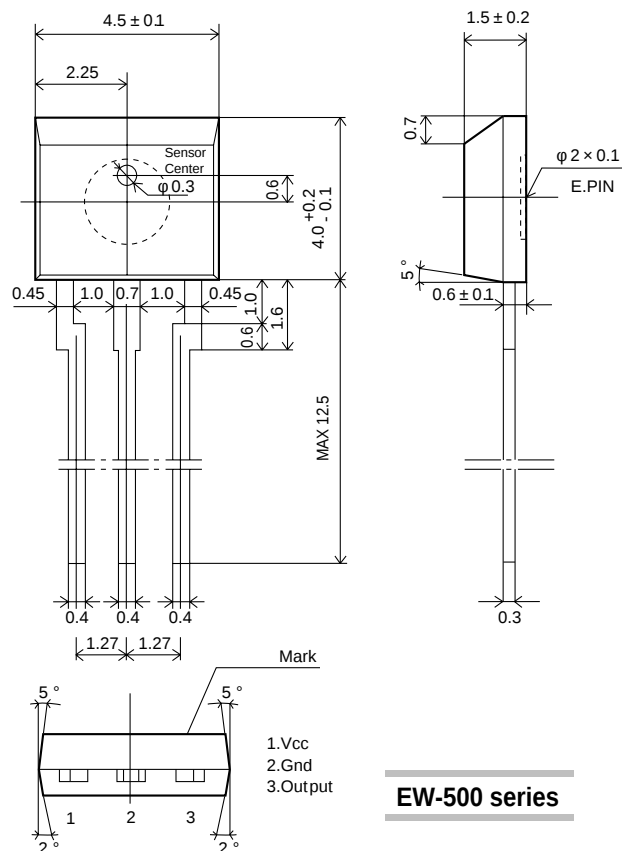
Supplied by
EW-560:500pcs. / Pack.
EW-460:5000pcs. / Reel

PACKAGE [Unit : mm]



- 1.Vcc
- 2.Gnd
- 3.Output

EW-400 series



- 1.Vcc
- 2.Gnd
- 3.Output

EW-500 series