

**HIGH VOLTAGE HALL EFFECT LATCH****AH278****Description**

The AH278 is an integrated Hall sensor with output driver designed for electronic commutation of brushless DC motor applications. The device includes an on-chip Hall sensor for magnetic sensing, an amplifier that amplifies the Hall voltage, a Schmitt trigger to provide switching hysteresis for noise rejection and two complementary open-collector drivers for sinking large load current. It also includes an internal band-gap regulator which is used to provide bias voltage for internal circuits and allows a wide operating supply voltage ranges.

Placing the device in a variable magnetic field, if the magnetic flux density is larger than threshold B_{OP} the pin DO will be turned low (on) and pin DOB will be turned high (off). This output state is held until the magnetic flux density reverses and falls below B_{RP} , then causes DO to be turned high (off) and DOB turned low (on).

Features

- On-Chip Hall Sensor
- 4V to 30V Supply Voltage
- 500mA (avg) Output Sink Current
- Build in Protection Diode for Reverse Power Connecting
- -20°C to 85°C Operating Temperature
- Low Profile TO-94 (SIP-4L) Package
- Build in Over Temperature Protection Function
- ESD Rating: 300V(Machine Model)

Applications

- 12V/24V Dual-Coil Brushless DC Motor/Fan
- Power Supply and Switchboard
- Communications Facilities
- Industrial Equipment

Parametric Table

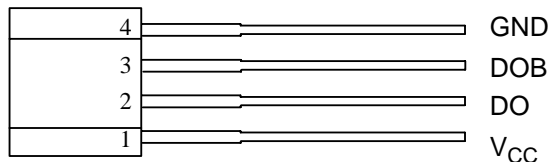
Supply Current (mA)	12.5
Output Saturation Voltage (24V, 300mA) (V)	0.25
Hysteresis (Gauss)	80
Output Leakage Current (μ A)	0.1
Package	TO-94

Benefits

- Good High Temperature Performance
- With Over Temperature Protection (OTP) function
- Very Low Saturation Voltage
- Complementary Output
- Optimization Solution: Higher Current at High Voltage(24V) and Temperature (85°C)

Additional Available Materials

- Samples
- Data Sheet
- Reliability Report
- ESD Report

**TWO PHASE HALL EFFECT LATCH WITH FG OUTPUT****AH278****Pin Configuration**Z4 Package
(TO-94)**Ordering Information Example**

Package	Temperature Range	Part Number	Marking ID	Packing Type
TO-94	-20 to 85 °C	AH278Z4-AE1	AH278Z4-E1	Bulk
		AH278Z4-BE1	AH278Z4-E1	Bulk

Detailed information please refer to the relevant datasheet.

Sales Office:**USA**30920 Huntwood Ave. Hayward, CA 94544,
USA

Tel : +1-510-324-2988

Fax : +1-510-324-2788

Taiwan4F, 298-1 Rui Guang Road, Nei-Hu District, Taipei,
Taiwan

Tel : 886-2-2656-2808

Fax : 886-2-2656-2806

Shanghai8F, B Zone, 900 Yi Shan Road, Shanghai 200233,
China

Tel : 86-21-6495 9539

Fax : 86-21-6485 9673

ShenzhenRoom E, 5F, Noble Center, No.1006, 3rd Fuzhong Road, Futian
District, Shenzhen 518026, China

Tel : 86-755-8826 7951

Fax : 86-755-8826 7865