

HIGH VOLTAGE HALL EFFECT LATCH

AH266

Description

The AH266 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 darlington 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).

Parametric Table

Supply Current (mA)	3.5
Output Saturation Voltage (24V, 300mA) (V)	0.9
Hysteresis (Gauss)	80
Output Leakage Current (µA)	0.1
Package	TO-94

Features

- On-Chip Hall Sensor
- 4V to 30V Supply Voltage
- 400mA (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)

Benefits

- Good High Temperature Performance
- With Over Temperature Protection (OTP)
 Function
- Low Supply Current
- High Driver Capability with Darlington Output
- Cost Effect Solution for High Voltage (24V) and Temperature (85°C)

Applications

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

Additional Available Materials

- Samples
- Data Sheet
- Reliability Report
- ESD Report

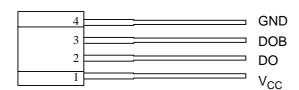


TWO PHASE HALL EFFECT LATCH WITH FG OUTPUT

AH266

Pin Configuration

Z4 Package (TO-94)



Ordering Information Example

Package	Temperature Range	Part Number	Marking ID	Packing Type
TO-94	-20 to 85 °C	AH266Z4-AE1	AH266Z4-E1	Bulk
		AH266Z4-BE1	AH266Z4-E1	Bulk

Detailed information please refer to the relevant datasheet.

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