

**SINGLE PHASE HALL EFFECT LATCH****AH477****Description**

The AH477 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 comparator to provide switching hysteresis for noise rejection, a bi-directional drivers for sinking and driving large current load. It also includes an internal bandgap regulator to provide temperature compensated bias for internal circuits and allows a wide operating supply voltage range.

Placing the device in a variable magnetic field, if the magnetic flux density is larger than threshold B_{OP} , the DO is turned to sink and DOB is turned to drive. This output state is held until the magnetic flux density reverses and falls below B_{RP} , then causes DO to be turned to drive and DOB turned to sink.

Parametric Table

Supply Voltage (V)	4 to 20
Output Down Saturation Voltage (V)	0.25
Output Up Saturation Voltage (V)	1.0
Supply Current (mA)	14
Hysteresis (Gauss)	70
Package	TO-94

Features

- On-Chip Hall Sensor
- Operating Voltage: 4V to 20V
- H-Bridge Output Drivers for Single Coil
- Internal Bandgap Regulator for Temperature Compensation
- Low Output Switching Current Noise
- -20°C to 85°C Operating Temperature
- Low Profile TO-94 (SIP-4L) Package
- ESD Rating: 3000V (Human Body Model)

Benefits

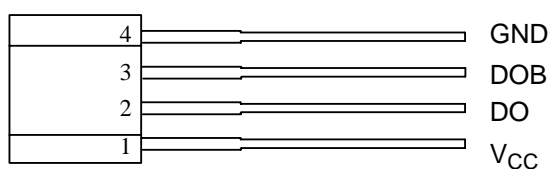
- Minimum External Components
- Good High Temperature Performance
- High Efficiency
- Rotate Reposefully

Applications

- Single-Coil Brushless DC Motor
- Single-Coil Brushless DC Fan

Additional Available Materials

- Samples
- Preliminary Datasheet
- Reliability Report
- ESD Report

**SINGLE PHASE HALL EFFECT LATCH****AH477****Pin Configuration**Z4 Package
(TO-94)**Ordering Information Example**

Package	Temperature Range	Part Number	Marking ID	Packing Type
TO-94	-20 to 85 °C	AH477Z4-AE1	AH477Z4-AE1	Bulk
		AH477Z4-BE1	AH477Z4-BE1	Bulk

Detailed information please refer to the relevant datasheet.

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