

HALL SENSOR SERIES

FS177

Single Output Hall Effect Sensor

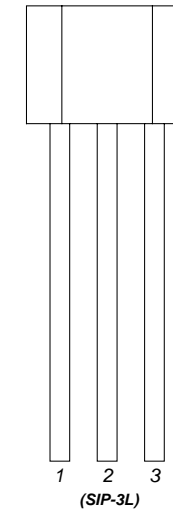
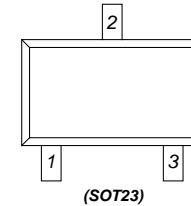
Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 3.0V to 20V*
- » *Max. output sink current 25mA*
- » *Open-Collector pre-driver*
- » *Reverse power polarity protection*
- » *Operating Temperature: -20 °C to 100 °C*

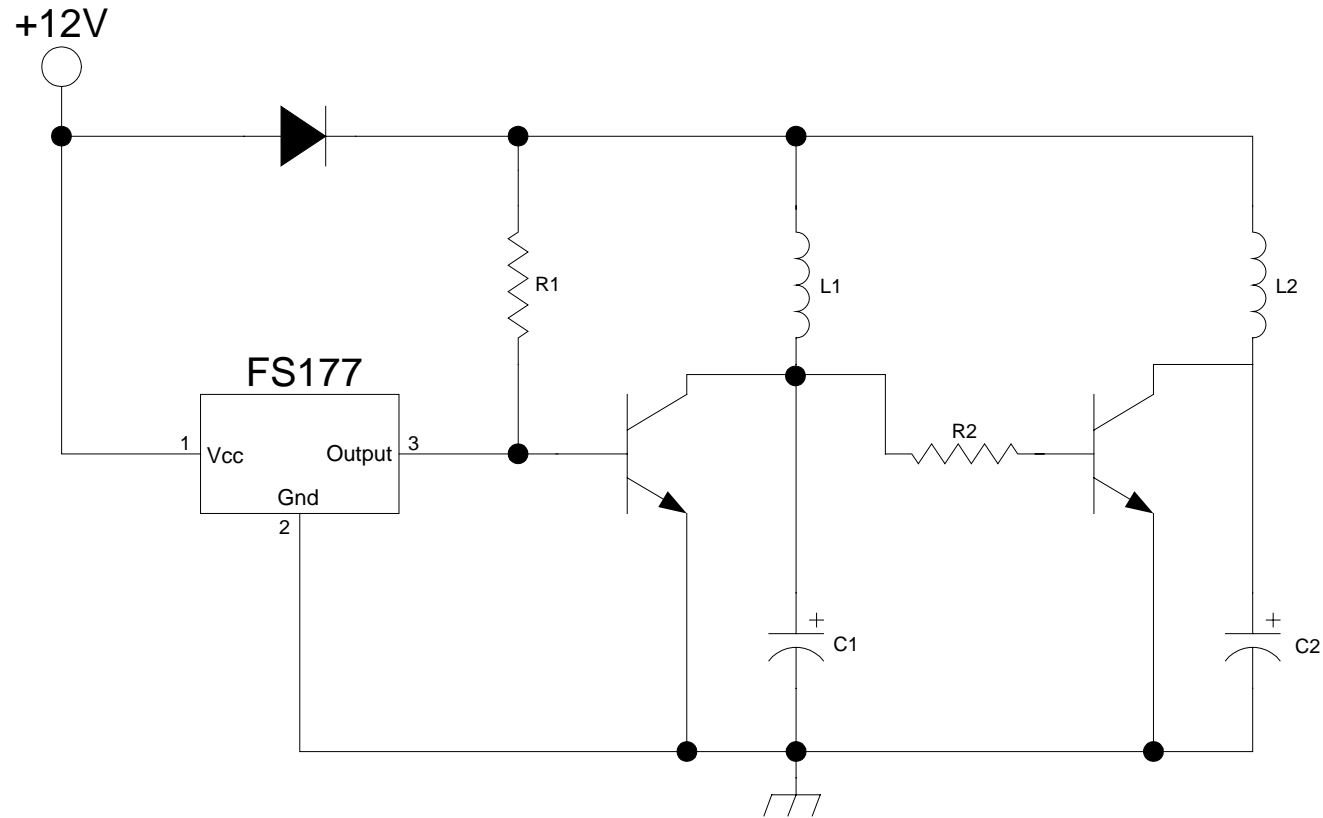
Package Type: SIP-3L, SOT23

Application

Brushless DC Fan



FS177 **Typical Application Circuit**



Brushless DC Fan

HALL SENSOR SERIES

FS40/FS41

Single Output Hall Effect Sensor

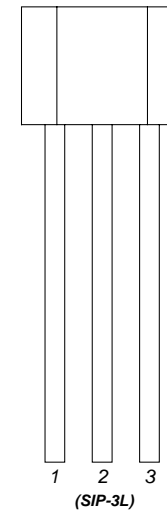
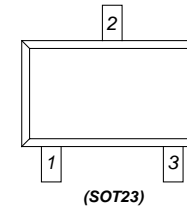
Feature

- » **On chip Hall sensor**
- » **Wide operating voltage range
DC 3.0V to 20V**
- » **Max. output sink current 50mA**
- » **Open-Collector pre-driver**
- » **Reverse power polarity protection**
- » **Operating Temperature: -20 °C to 125 °C (FS40)
-40 °C to 150 °C (FS41)**

Package Type: SIP-3L, SOT23

Application

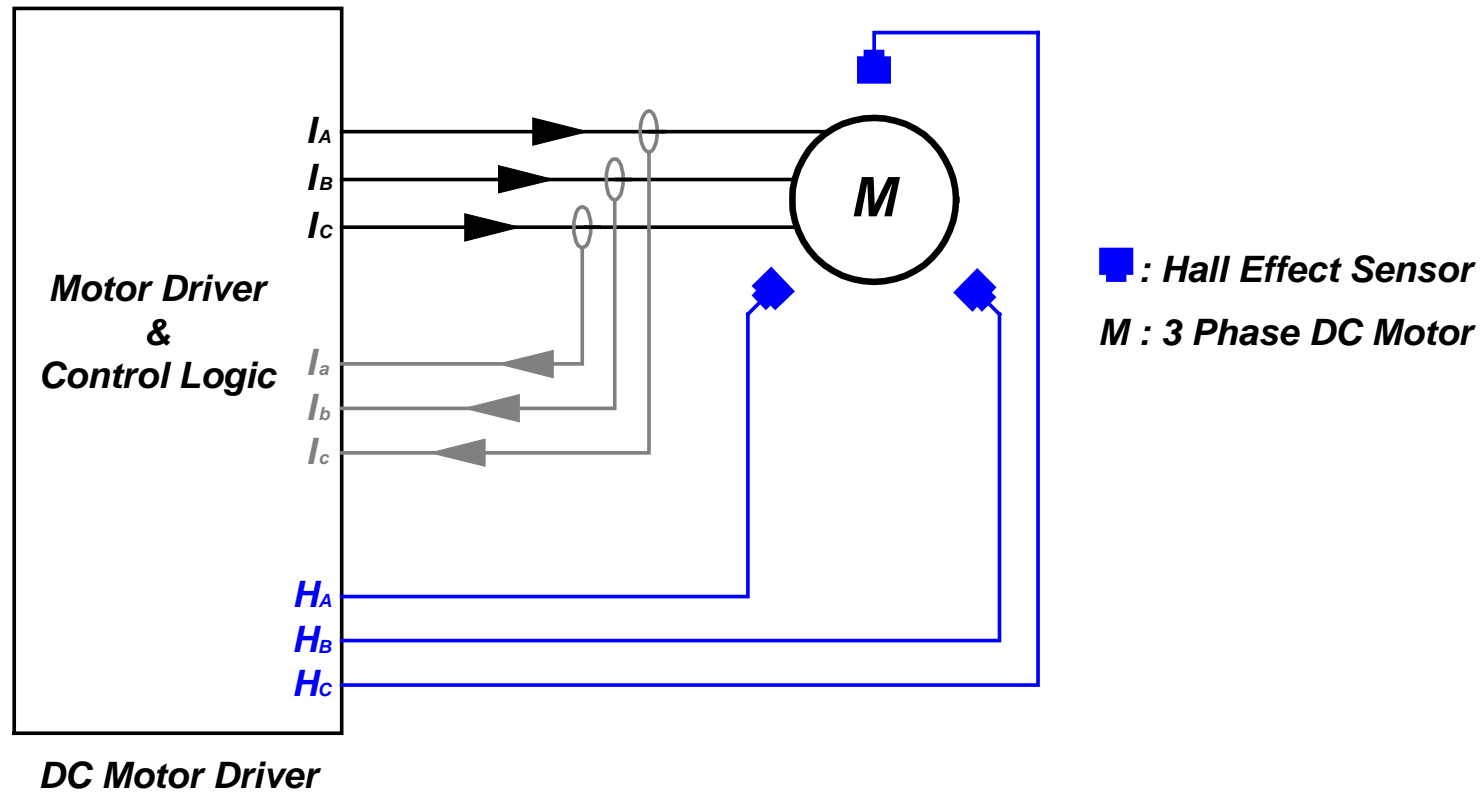
Brushless DC Motor



HALL SENSOR SERIES

FS40/FS41

Typical Application Circuit



3 Phase DC Motor Application

HALL SENSOR SERIES

FS310/FS319

Single Phase DC Motor Driver

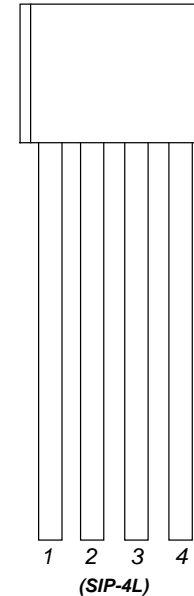
Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 3.0V to 20V*
- » *Max. output sink current 300mA*
- » *H-Bridge Transistor Output*
- » *Operating Temperature: -20 °C to 85 °C*
- » *Output Thermal-Shutdown Protection(FS319 Only)*

Package Type: SIP-4L

Application

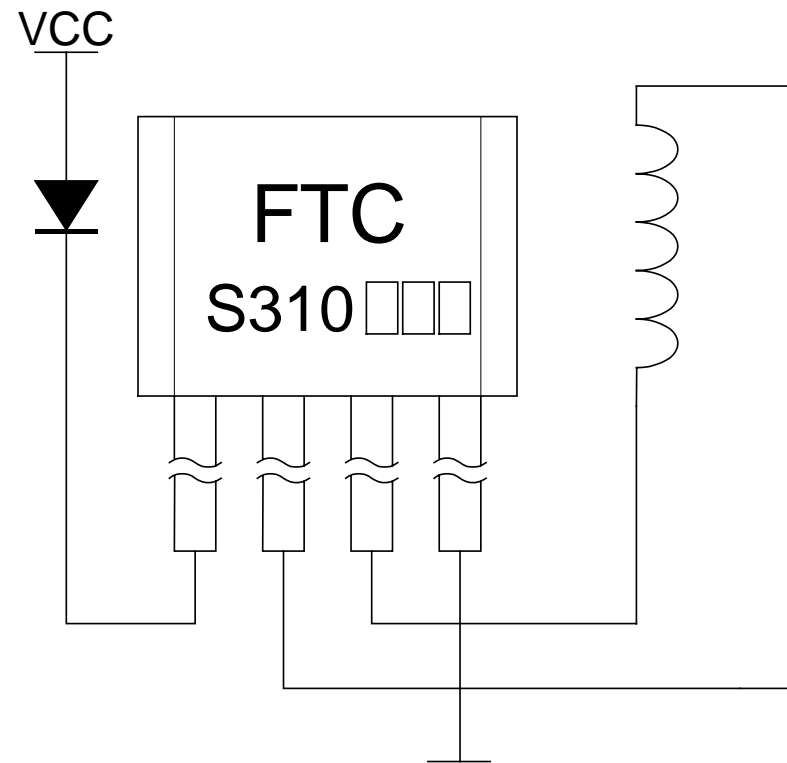
Brushless Single-Coil DC Fan



HALL SENSOR SERIES

FS310/FS319

Typical Application Circuit



Brushless Single-Coil DC Fan

HALL SENSOR SERIES

FS200/FS209

Two Phase DC Motor Driver

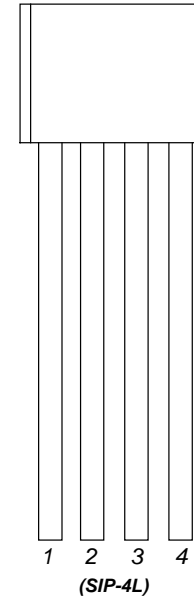
Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 2.0V to 20V*
- » *Max. output sink current 450mA*
- » *Open-Collector pre-driver*
- » *Operating Temperature: -20 °C to 85 °C*
- » *Reverse power polarity protection*
- » *Output Thermal-Shutdown Protection(FS209 Only)*

Package Type: SIP-4L

Application

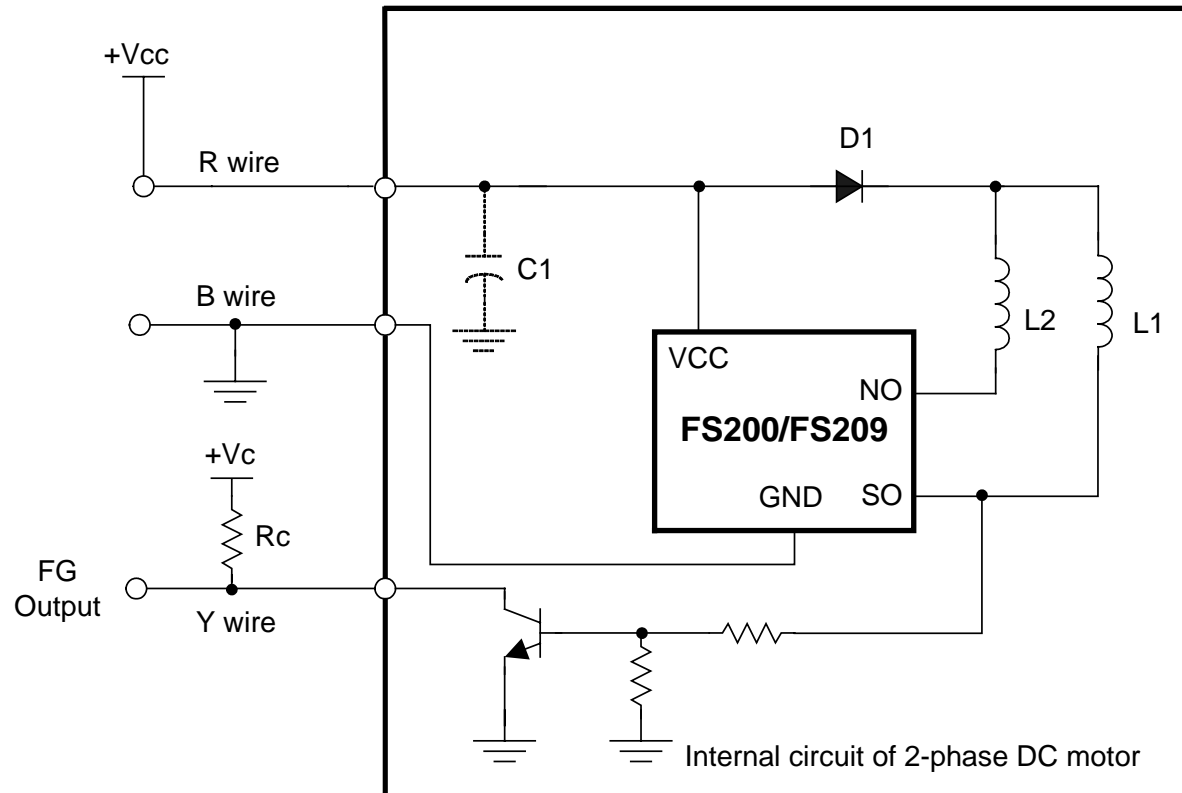
Brushless Dual-Coil DC Fan



HALL SENSOR SERIES

FS200/FS209

Typical Application Circuit



Brushless Dual-Coil DC Fan

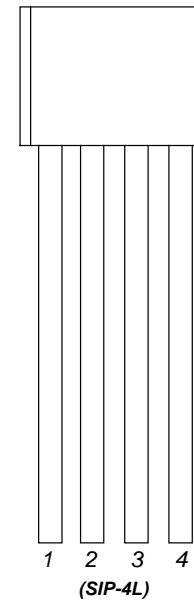
HALL SENSOR SERIES

FS208

Two Phase DC Motor Driver

Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 3.0V to 20V*
- » *Max. output sink current 450mA*
- » *Open-Collector pre-driver*
- » *Operating Temperature: -20 °C to 85 °C*
- » *Built in FG output*
- » *Output Thermal-Shutdown Protection*
- » *Low Quiescent Supply Current under 5mA*



Package Type: SIP-4L

Application

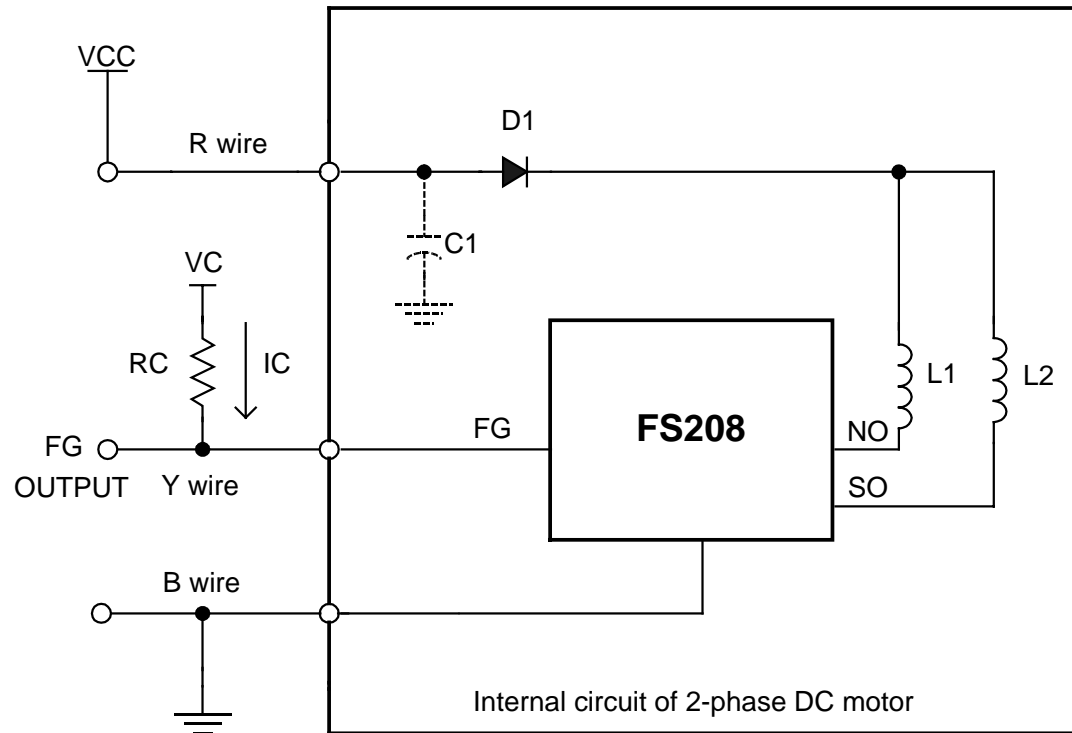
Brushless Dual-Coil DC Fan



HALL SENSOR SERIES

FS208

Typical Application Circuit



Brushless Dual-Coil DC Fan

HALL SENSOR SERIES

FS210

Two Phase DC Motor Driver

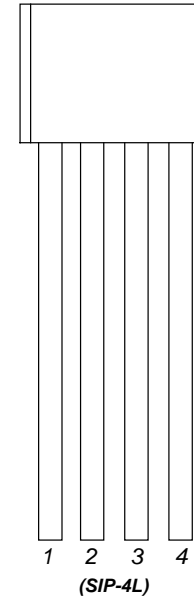
Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 2.8V to 20V*
- » *Max. output sink current 450mA*
- » *Open-Collector pre-driver*
- » *Operating Temperature: -20 °C to 100 °C*
- » *Reverse Power Polarity Protection*
- » *Very Low Switching Noise*

Package Type: SIP-4L

Application

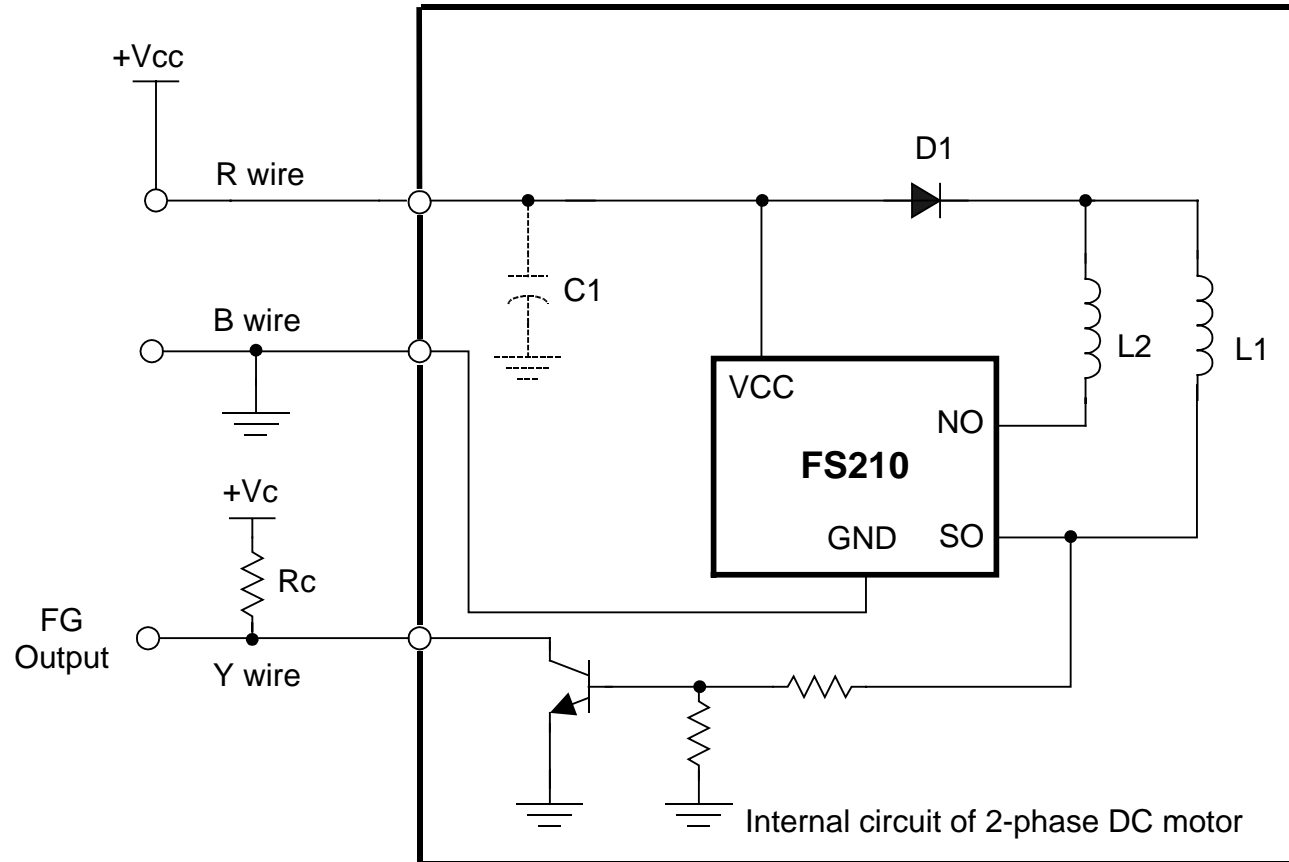
Brushless Dual-Coil DC Fan



HALL SENSOR SERIES

FS210

Typical Application Circuit



Brushless Dual-Coil DC Fan

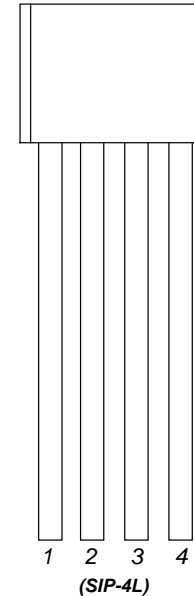
HALL SENSOR SERIES

FS211

Two Phase DC Motor Driver

Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 4.0V to 20V*
- » *Max. output sink current 400mA*
- » *Open-Collector pre-driver*
- » *Operating Temperature: -20 °C to 90 °C*
- » *Built in FG output*
- » *Low Quiescent Supply Current under 5mA*



Package Type: SIP-4L

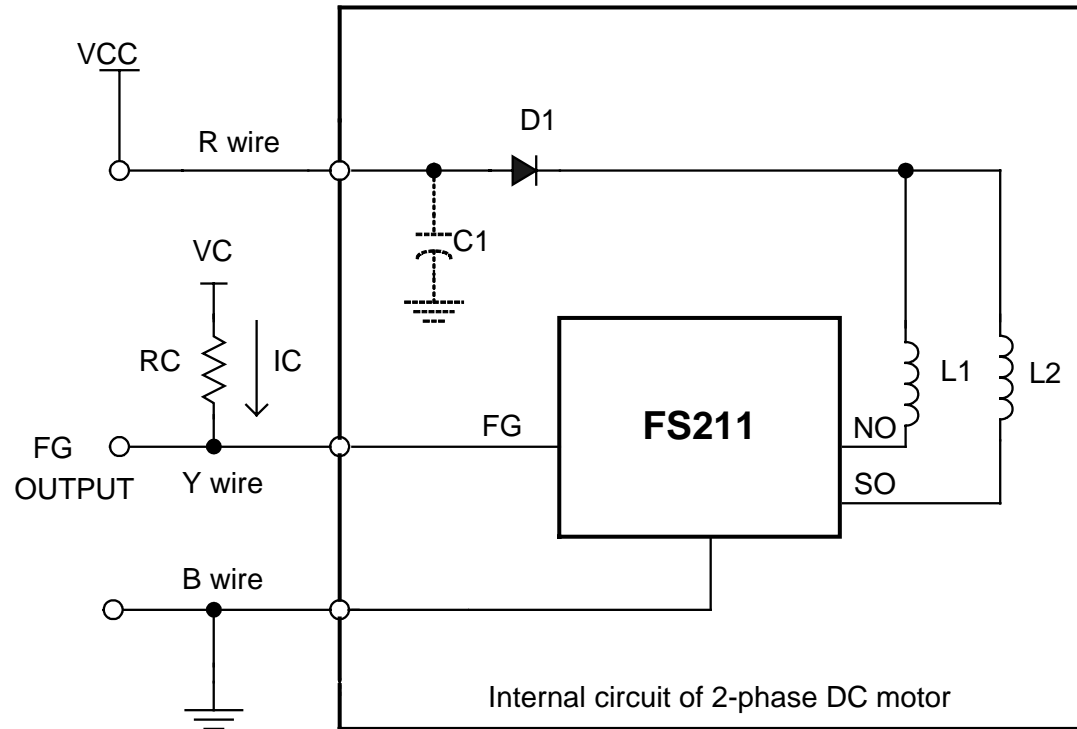
Application

Brushless Dual-Coil DC Fan

HALL SENSOR SERIES

FS211

Typical Application Circuit



Brushless Dual-Coil DC Fan

HALL SENSOR SERIES

Brushless Dual-Coil DC Fan

FS212

Two Phase DC Motor Driver

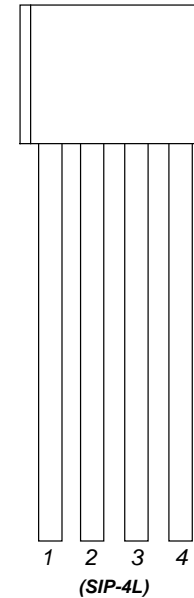
Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 4.0V to 20V*
- » *Max. output sink current 400mA*
- » *Open-Collector pre-driver*
- » *Operating Temperature: -20 °C to 85 °C*
- » *Built-in Lock Shutdown and Re-start Function*
- » *Low Quiescent Supply Current under 5mA*

Package Type: SIP-4L

Application

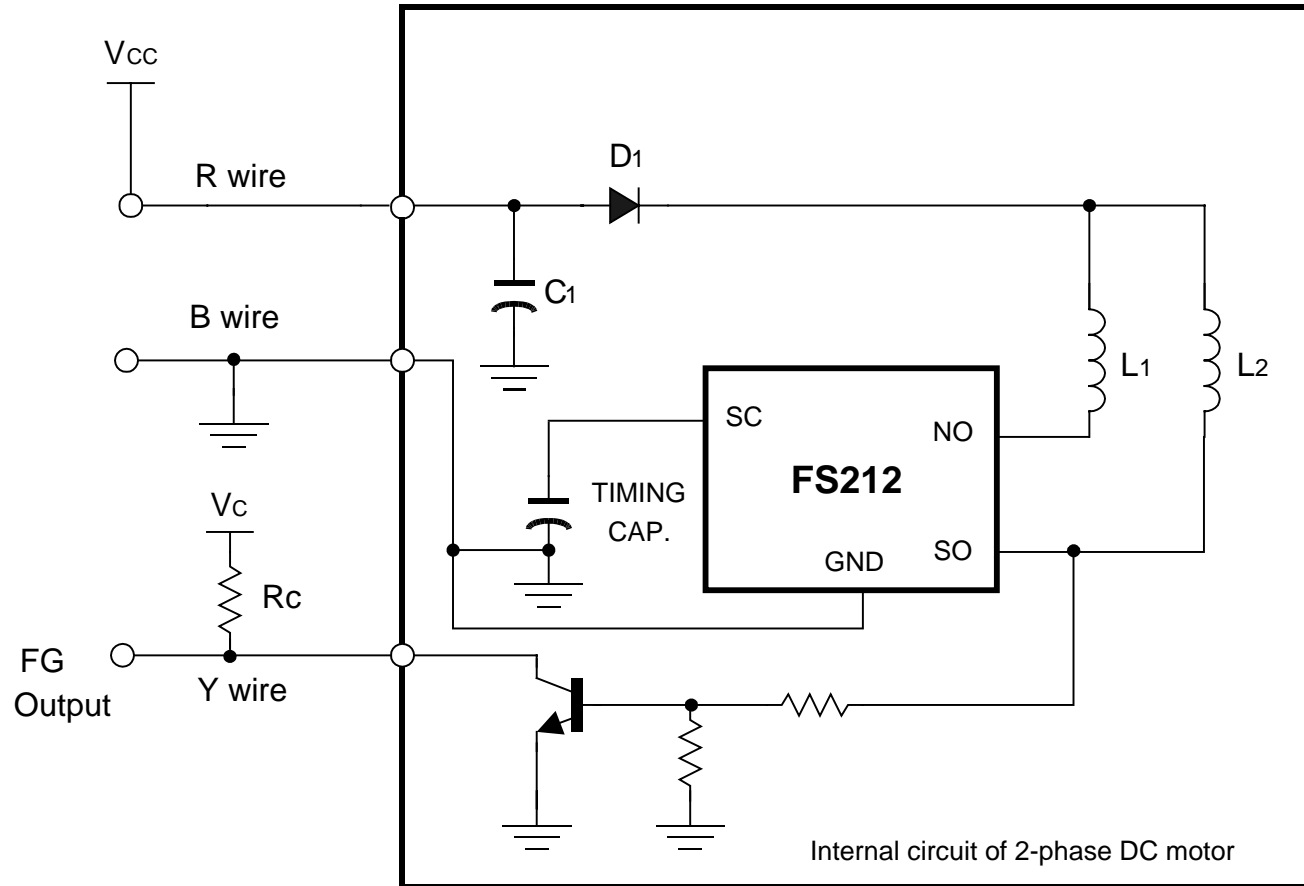
Brushless Dual-Coil DC Fan



HALL SENSOR SERIES

FS212

Typical Application Circuit



Brushless Dual-Coil DC Fan

HALL SENSOR SERIES

FS220

Two Phase DC Motor Driver

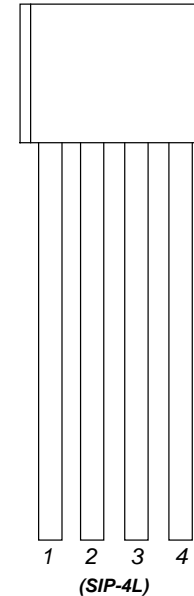
Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 2.8V to 28V*
- » *Max. output sink current 400mA*
- » *Open-Collector pre-driver*
- » *Operating Temperature: -20 °C to 85 °C*
- » *Reverse power polarity protection*

Package Type: SIP-4L

Application

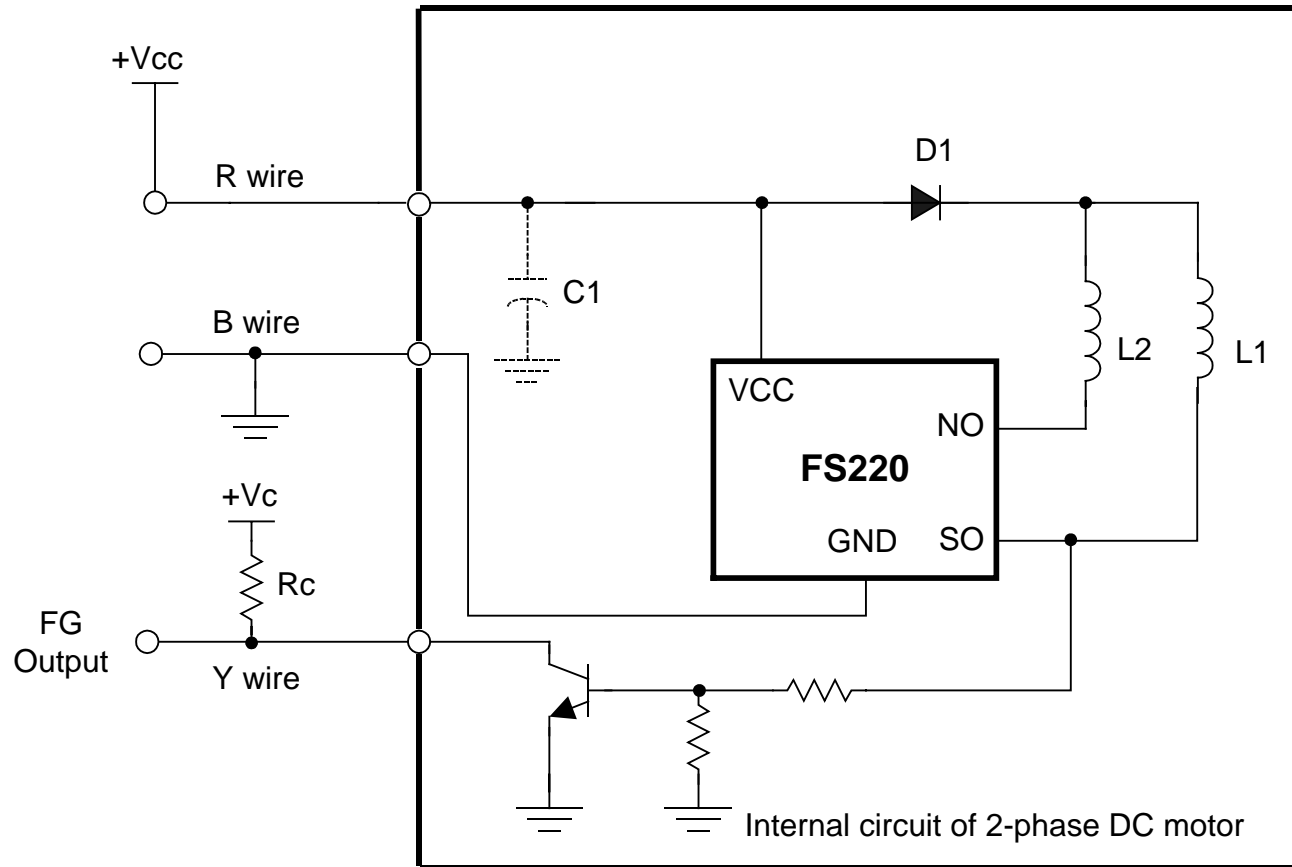
24V Brushless Dual-Coil DC Fan



HALL SENSOR SERIES

FS220

Typical Application Circuit



Brushless Dual-Coil DC Fan

HALL SENSOR SERIES

FS276/FS277

Two Phase DC Motor Driver

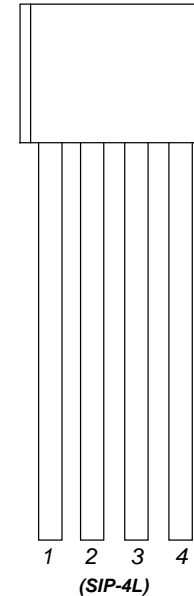
Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 3.0V to 20V*
- » *Max. output sink current 400mA*
- » *Open-Collector pre-driver*
- » *Operating Temperature: -20 °C to 85 °C*
- » *Reverse power polarity protection*

Package Type: SIP-4L

Application

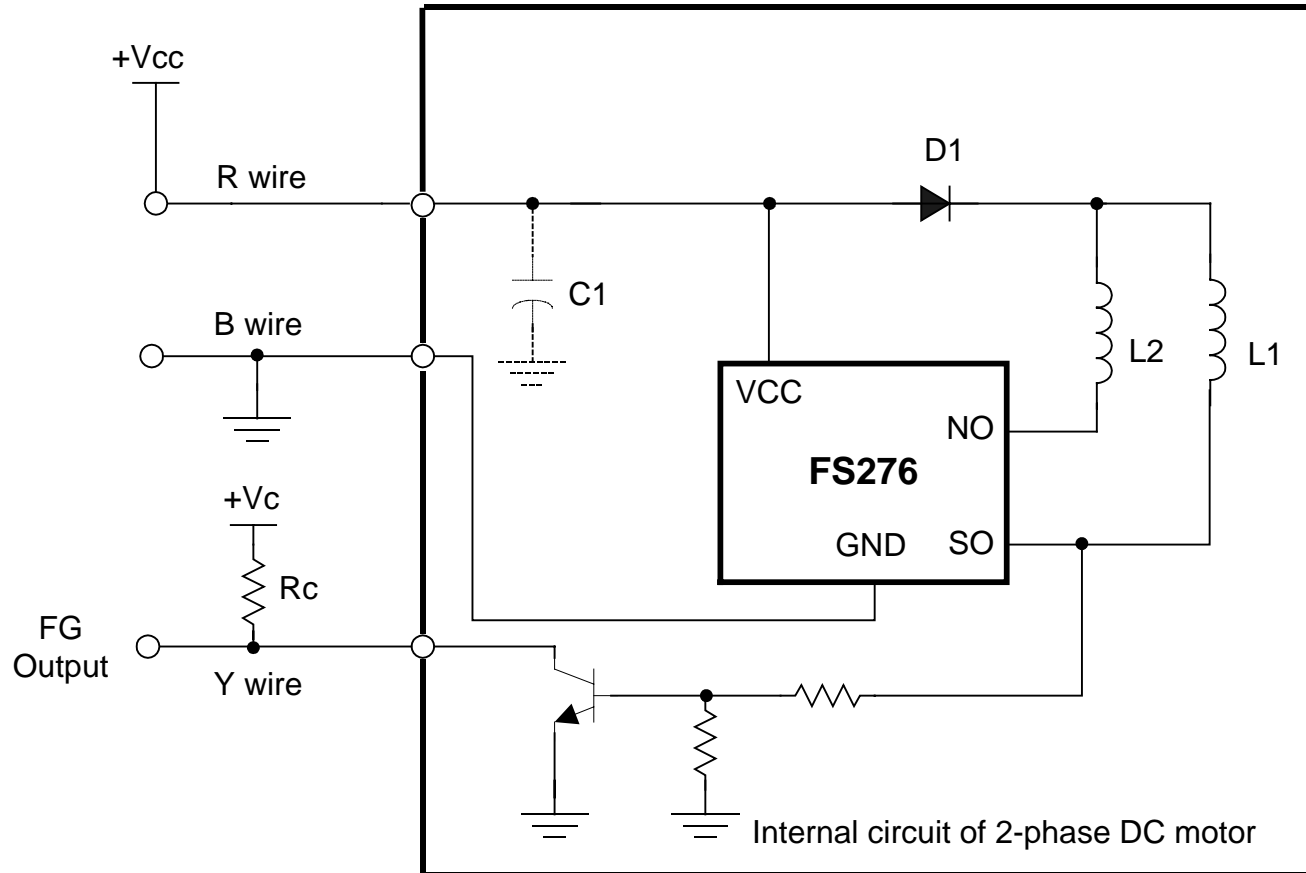
Brushless Dual-Coil DC Fan



HALL SENSOR SERIES

FS276/FS277

Typical Application Circuit



Brushless Dual-Coil DC Fan

HALL SENSOR SERIES

FS42

Two Phase DC Motor Driver

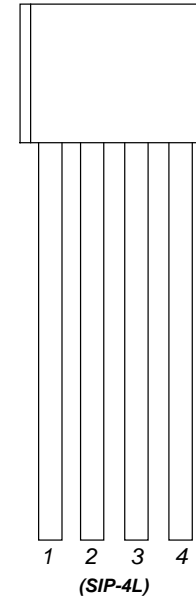
Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 3.0V to 20V*
- » *Max. output sink current 50mA*
- » *Open-Collector pre-driver*
- » *Operating Temperature: -20 °C to 100 °C*
- » *Reverse power polarity protection*
- » *Low Quiescent Supply Current under 5mA*

Package Type: SIP-4L

Application

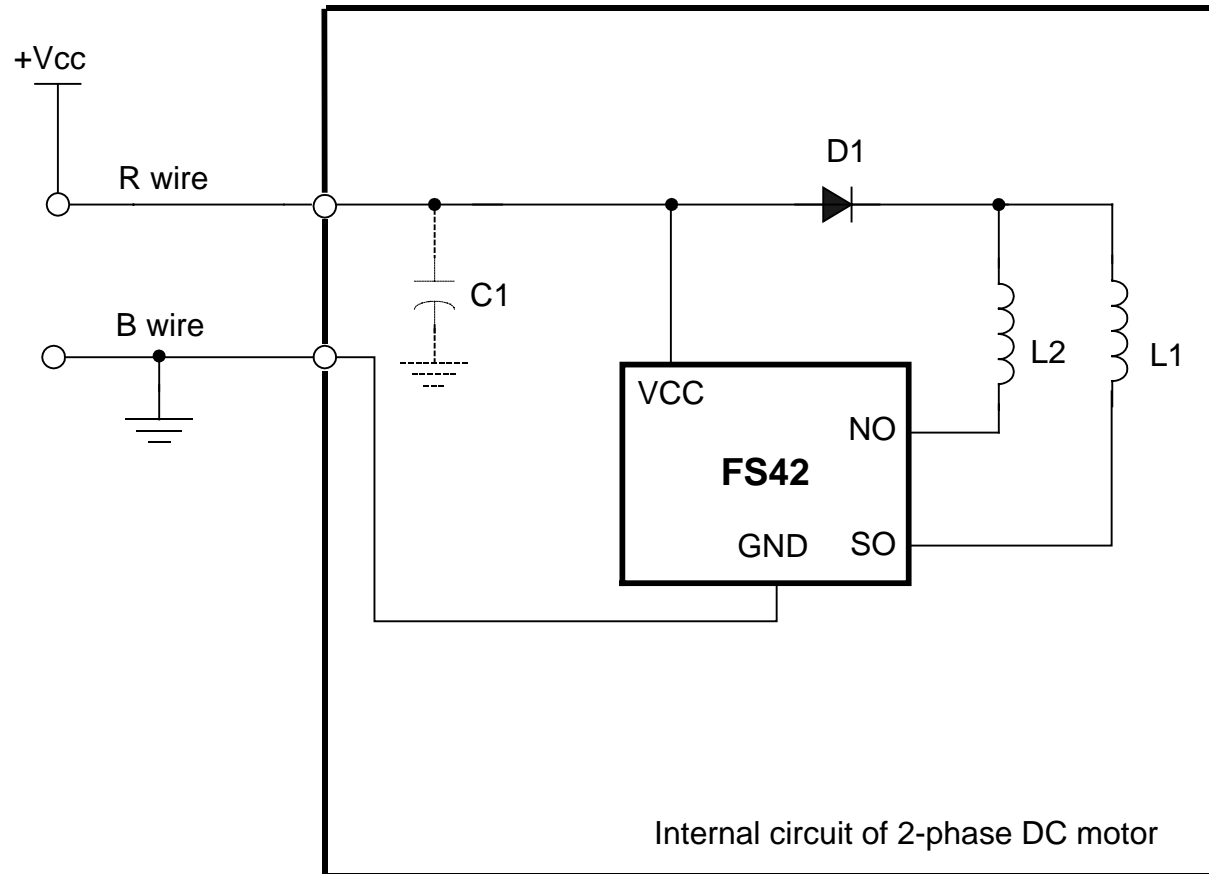
Brushless Dual-Coil DC Fan



HALL SENSOR SERIES

FS42

Typical Application Circuit



Brushless Dual-Coil DC Fan

HALL SENSOR SERIES

FS1295H

Single Phase DC Motor Driver

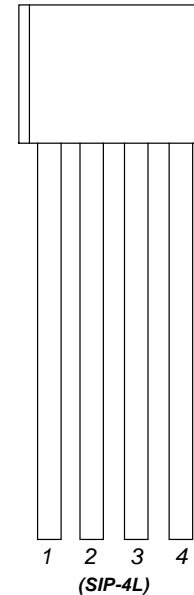
Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 2.5V to 16V*
- » *Max. output sink current 550mA*
- » *H-Bridge Transistor Output*
- » *Operating Temperature: -20 °C to 105 °C*
- » *Built-in Lock Shutdown and Re-start Function*

Package Type: SIP-4L

Application

Brushless Single-Coil DC Fan

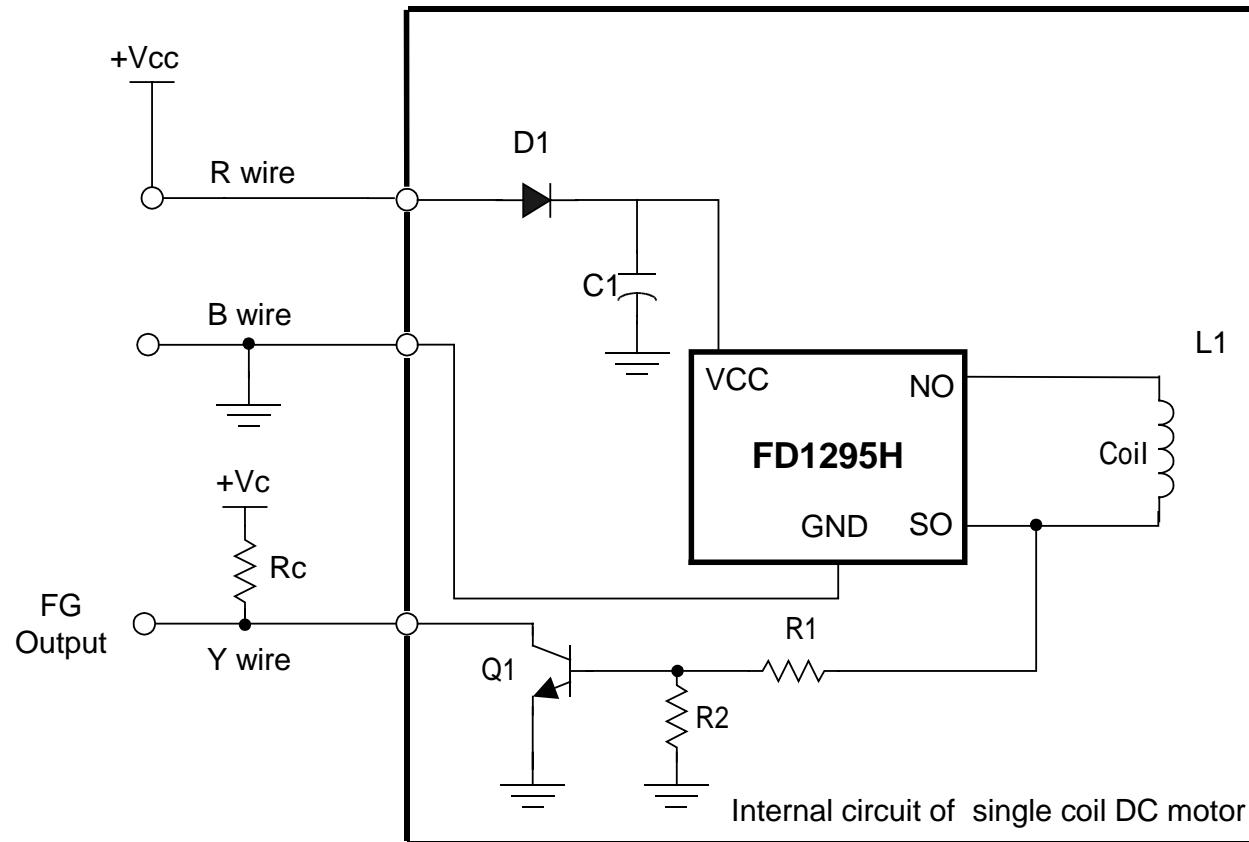


HALL SENSOR SERIES

FS1295H

Typical Application Circuit

Single Phase DC Motor Driver



Brushless Single-Coil DC Fan

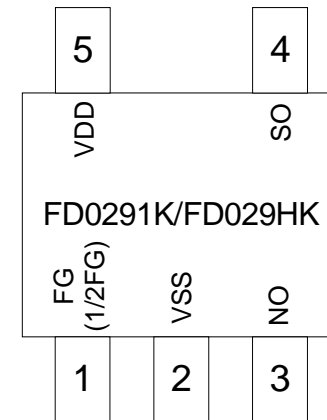
HALL SENSOR SERIES

FD0291K/FD029HK

Single Phase DC Motor Driver

Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 1.8V to 6.5V*
- » *Max. output sink current 500mA/Lock 800mA*
- » *H-Bridge Transistor Output*
- » *Operating Temperature: -20 °C to 85 °C*
- » *Built-in Lock Shutdown and Re-start Function*
- » *FD029HK for 1/2 FG signal output*



Package Type: SOT25

Application

5 V series Brushless Single-Coil DC Fan

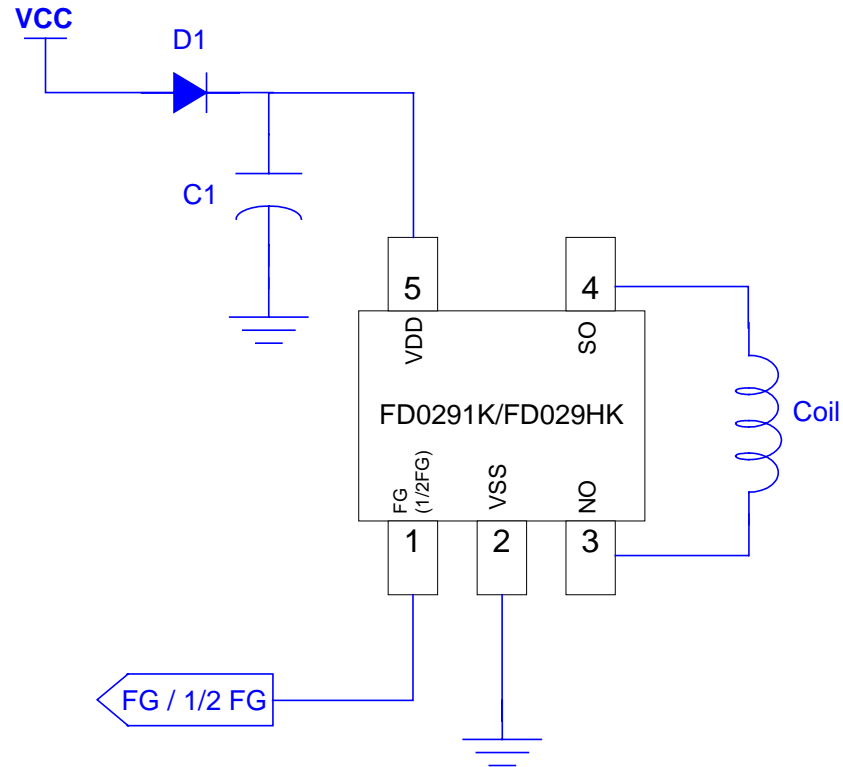


HALL SENSOR SERIES

FD0291K

Typical Application Circuit

Single Phase DC Motor Driver



ps. 1/2FG for FD029HK

Brushless Single-Coil DC Fan

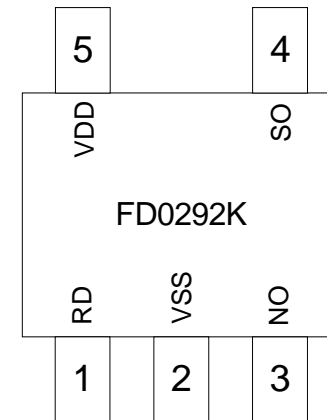
HALL SENSOR SERIES

FD0292K

Single Phase DC Motor Driver

Feature

- » *On chip Hall sensor*
- » *Wide operating voltage range
DC 1.8V to 6.5V*
- » *Max. output sink current 500mA/ Lock 800mA*
- » *H-Bridge Transistor Output*
- » *Operating Temperature: -20 °C to 85 °C*
- » *Built-in Lock Shutdown and Re-start Function*
- » *RD signal output*



Package Type: SOT25

Application

5 V series Brushless Single-Coil DC Fan

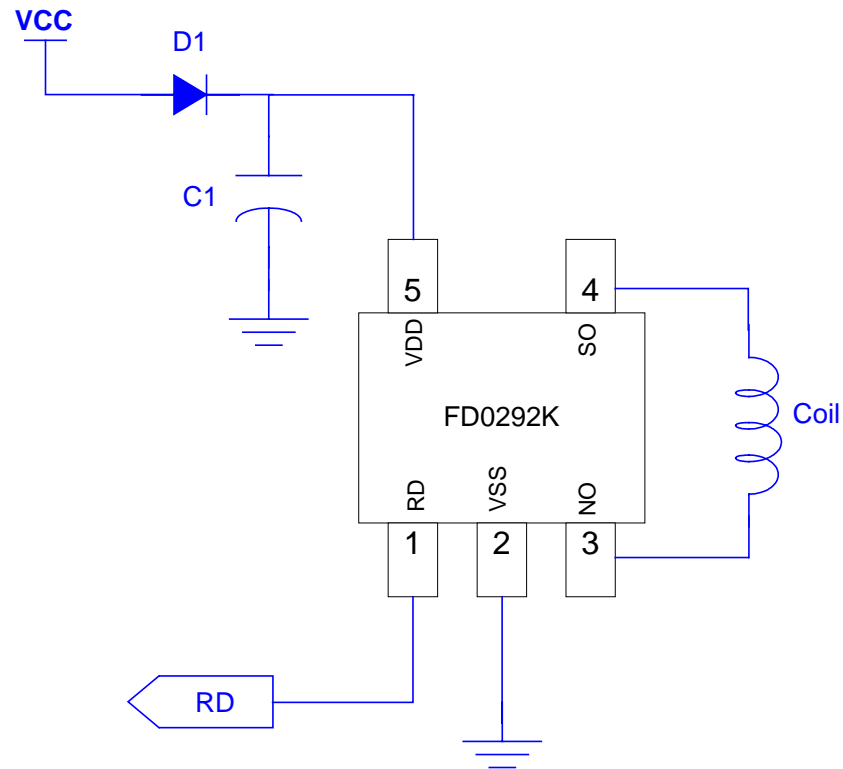


HALL SENSOR SERIES

FD0292K

Typical Application Circuit

Single Phase DC Motor Driver



Brushless Single-Coil DC Fan

HALL SENSOR SERIES

FS50

Linear Hall-Effect Sensor

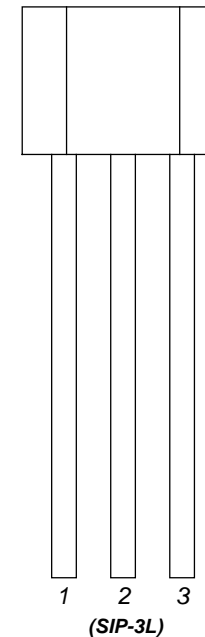
Feature

- » *On chip Hall sensor*
- » *Operating voltage range
DC 4.0V to 9.0V*
- » *Extremely Sensitive*
- » *Flat Response to 23KHz*
- » *Low Noise Output*
- » *Operating Temperature: -20 °C to 85 °C*

Package Type: SIP-3L

Application

Single Linear Output Application



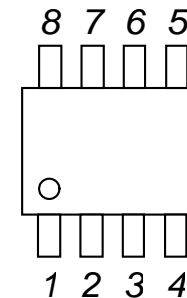
HALL SENSOR SERIES

FD128ND

Single Phase DC Motor Driver

Feature

- » **Operating voltage range
DC 4.5V to 20V**
- » **Max. output sink current 1A(lock state)**
- » **Max. output sink current 600mA(continue state)**
- » **H-Bridge Type Output drivers for single coil**
- » **Operating Temperature: -20 °C to 85 °C**
- » **Thermister or PWM mode speed control**
- » **Auto-Shutdown & Thermal-Shutdown Protection**



Package Type: SOP8

Application

Brushless Single-Coil DC Fan

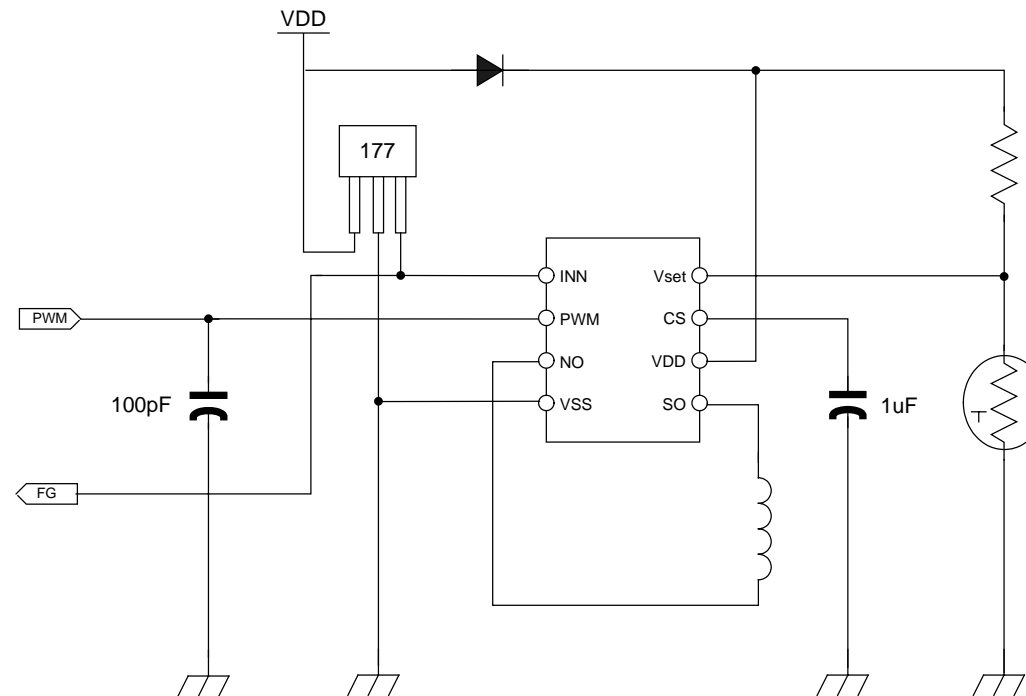
Pin Assign:

Pin1 : INN	Pin5 : SO
Pin2 : PWM	Pin6 : VDD
Pin3 : NO	Pin7 : CS
Pin4 : VSS	Pin8 : Vset

HALL SENSOR SERIES

FD128ND

Typical Application Circuit



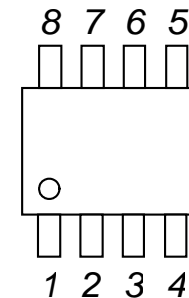
HALL SENSOR SERIES

FD128MD

Single Phase DC Motor Driver

Feature

- » **Operating voltage range
DC 4.5V to 20V**
- » **Max. output sink current 1A(lock state)**
- » **Max. output sink current 600mA(continue state)**
- » **H-Bridge Type Output drivers for single coil**
- » **Operating Temperature: -20 °C to 85 °C**
- » **Built-in RD signal output**
- » **Auto-Shutdown & Thermal-Shutdown Protection**



Package Type: SOP8

Application

Brushless Single-Coil DC Fan

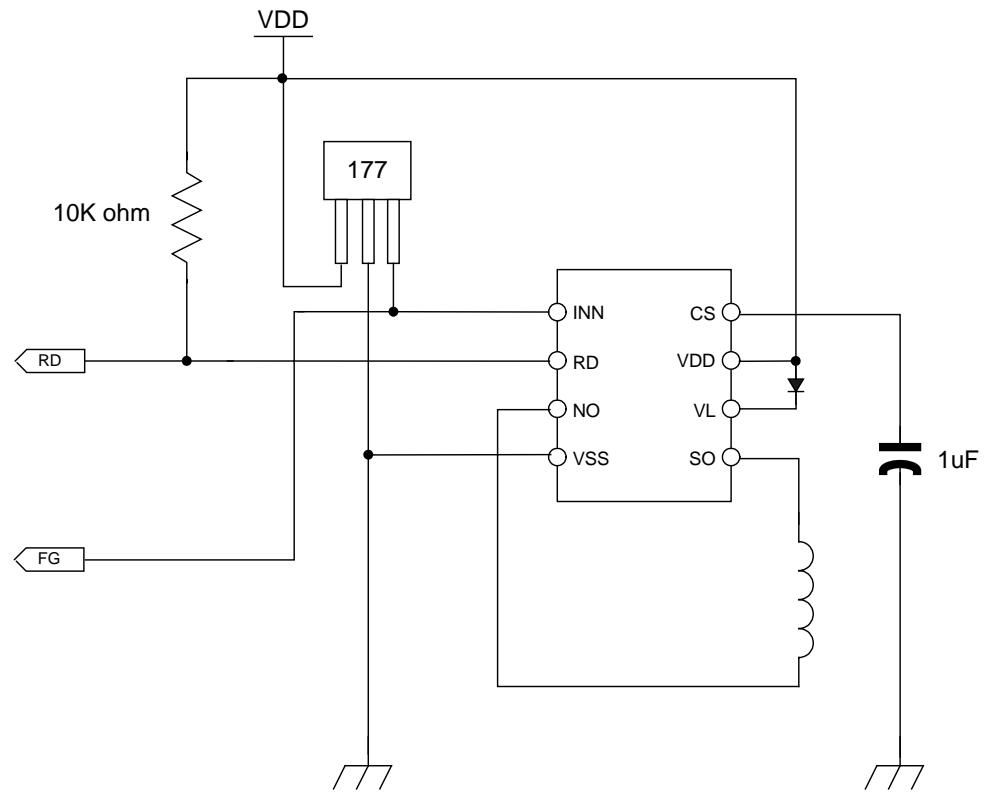
Pin Assign:

Pin1 : INN	Pin5 : SO
Pin2 : RD	Pin6 : VL
Pin3 : NO	Pin7 : VDD
Pin4 : VSS	Pin8 : CS

HALL SENSOR SERIES

FD128MD

Typical Application Circuit



HALL SENSOR SERIES

FD128SD

Single Phase DC Motor Driver

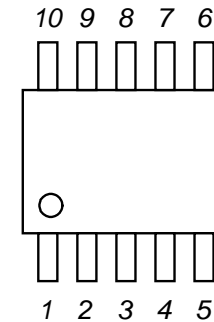
Feature

- » Operating voltage range
DC 4.5V to 20V
- » Max. output sink current 1A(lock state)
- » Max. output sink current 600mA(continue state)
- » H-Bridge Type Output drivers for single coil
- » Operating Temperature: -20 °C to 85 °C
- » **Built-in RD signal output**
- » **Thermister or PWM mode speed control**
- » **Auto-Shutdown & Thermal-Shutdown Protection**

Package Type: SOP10

Application

Brushless Single-Coil DC Fan



Pin Assign:

Pin1 : INN	Pin6 : SO
Pin2 : RD	Pin7 : VL
Pin3 : PWM	Pin8 : VDD
Pin4 : NO	Pin9 : CS
Pin5 : VSS	Pin10 : Vset

HALL SENSOR SERIES

FD128SD

Typical Application Circuit

