# L9110

## 1 Features

●Low quiescent operating current

●Wide supply voltage range:2.5V-12V

●800mA continuous current output capability per channel

●Lower saturation pressure drop

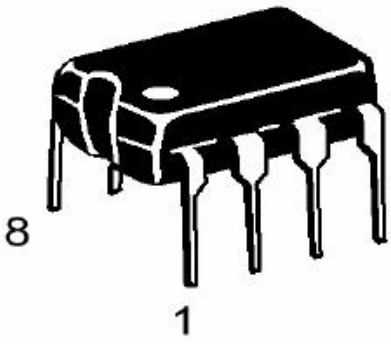
●TTL/CMOS output level compatible, can be directly connected to external MCU

●Output built-in clamp diode for inductive loads

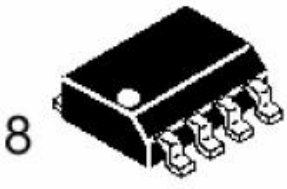
●Control and drive parts integrated into a single IC

●With pin high voltage protection

●Operating temperature: 0℃-80℃




DP 后缀 塑料封装(DIP8)




SO 后缀 塑料封装(SOP8)

## 2 Description

The L9110 is a two-channel push-pull power amplifier ASIC designed for control and drive motors.

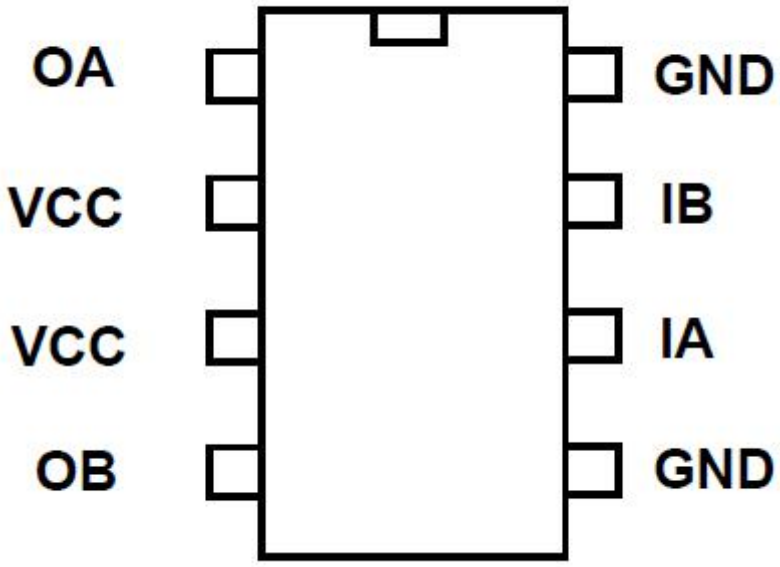
The circuit is integrated in a single IC, which reduces the cost of peripheral devices and improves the reliability of the whole machine.

The chip has two TTL/CMOS compatible level input with good anti-interference; two outputs can directly drive the forward and reverse movement of the motor, it has large current drive capability, each channel can pass 750~800mA continuous current, peak current capability up to 1.5~2.0A; at the same time it has a low output saturation voltage drop; the built-in clamping diode can release the reverse surge current of the inductive load,

It is safe and reliable in the use of drive relays, DC motors, stepper motors or switching power tubes. L9110 is widely used on circuits such as toy car motor drive, stepper motor drive and switching power tube.

# 3 Pin Configuration

## 3.1 Pin Assignment




## 3.1 Pin Definitions and Functions

| Pin | Symbol | Function |
|---|---|---|
| 1 | OA | Channel A output pin |
| 2 | VCC | Power supply |
| 3 | VCC | Power supply |
| 4 | OB | Channel B output pin |
| 5 | GND | Ground |
| 6 | IA | Channel A input pin |
| 7 | IB | Channel B input pin |
| 8 | GND | Ground |

## 4 Testing condition: Vcc =9V , Iout =750mA

| Symbol | Parameter | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|
| VHout | Output high Level | 7.50 | 7.60 | 7.70 | V |
| VLout | Output low Level | 0.35 | 0.45 | 0.55 | V |
| VHin | Input high Level | 2.5 | 5.0 | 9.0 | V |
| VLin | Input low Level | 0 | 0.5 | 0.7 | V |

## 5 Electrical characteristics

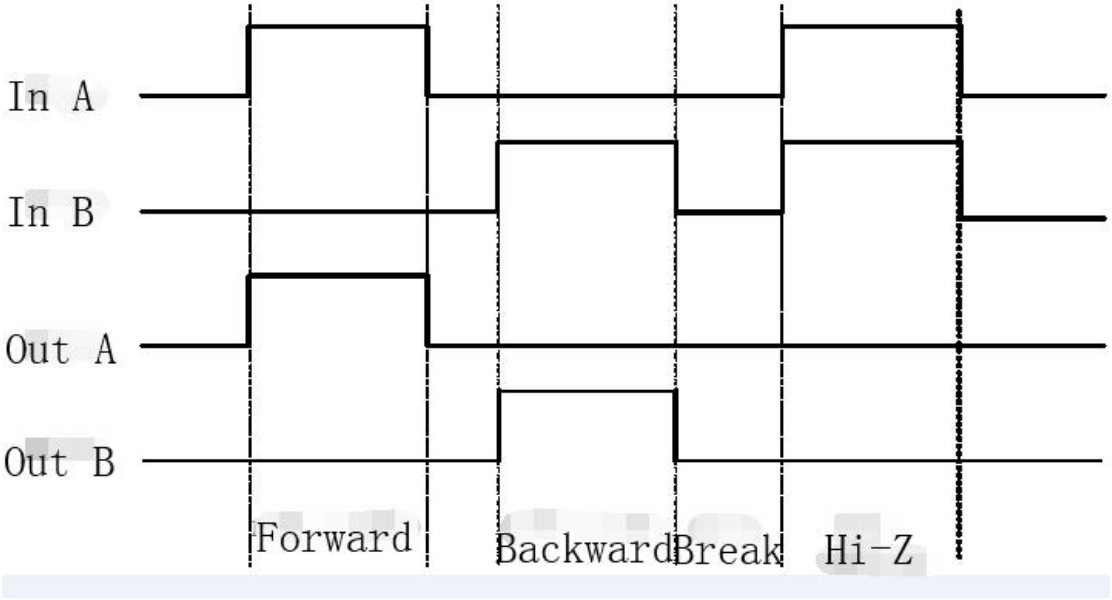
| Symbol | Parameter | Range | | | Unit |
|---|---|---|---|---|---|
| | | Min. | Typ. | Max. | |
| VCC | Power supply | 2.5 | 6 | 12 | V |
| Idd | Quiescent current | --- | 0 | 2 | uA |
| Iin | Operating current | 200 | 350 | 500 | uA |

| | | | | | |
|---|---|---|---|---|---|
| IC | Continuous output current | 750 | 800 | 850 | mA |
| IMax | Peak current | --- | 1500 | 2000 | mA |

## 6 Logical truth table

| IA | IB | OA | OB |
|---|---|---|---|
| H | L | H | L |
| L | H | L | H |
| L | L | L Break | L Break |
| H | H | Z Hi-Z | Z Hi-Z |

## 7 Pin waveform



## 8 Application Example