



说明

L9110S是为控制和驱动电机设计的两通道推挽式功率放大专用集成电路，将分立电路集成在单片 IC 中，使外围器件简单，整机成本降低的同时可靠性大大提高。

芯片有两个 TTL/CMOS 兼容电平的输入，具有良好的抗干扰性；两个输出端能直接驱动电机的正反向运动，它具有较大的电流驱动能力，每通道能通过 800mA 的持续电流，峰值电流能力可达 1.5A 同时它具有较低的输出饱和压降。内置的钳位二极管能释放感性负载的反向冲击电流，使它在驱动继电器、直流电机、步进电机或开关功率管的使用上安全可靠。

L9110S被广泛应用于玩具汽车电机驱动、脉冲电磁阀门驱动、步进电机驱动和开关功率管等电路上。

特征

- 电源电压范围：2.5V 至 12V
- 持续输出电流 800mA
- 最大输出电流达到 1.5A

应用

- 玩具
- 电子锁
- 阀门驱动



封装信息

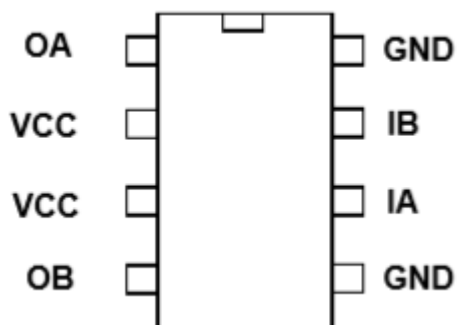
| 种类 | 封装形式 | 工作温度(° C) | 器件命名 | 器件打印 |
|--------|-------|--------------|--------|-----------------|
| L9110S | SOP-8 | 0°C to +85°C | L9110S | L9110S XXXXX |

注: XXXXX = 日期编码

引脚功能

| 名称 | 管脚 | I/O | 说明 |
|------|----|-----|-------|
| OA | 1 | O | 输出端 A |
| VCC | 2 | - | 电源 |
| VCC | 3 | - | 电源 |
| OB | 4 | O | 输出端 B |
| GND- | 5 | - | 地线 |
| IA | 6 | I | 输入端 A |
| IB | 7 | I | 输入端 B |
| GND | -8 | - | 地线 |

引脚排列



逻辑关系

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



电气最大额定值

| 特性 | 数值 | 单位 |
|-----------------|------------|----|
| 电源电压,VCC to GND | 15 | V |
| 输入电压范围 | - 0.3 to 9 | V |
| 输入电流范围 | 10 | mA |
| 工作温度范围 | 0 to 85 | °C |
| 结温 | 150 | °C |
| 储存温度范围 | -65 to 150 | °C |

推荐工作条件

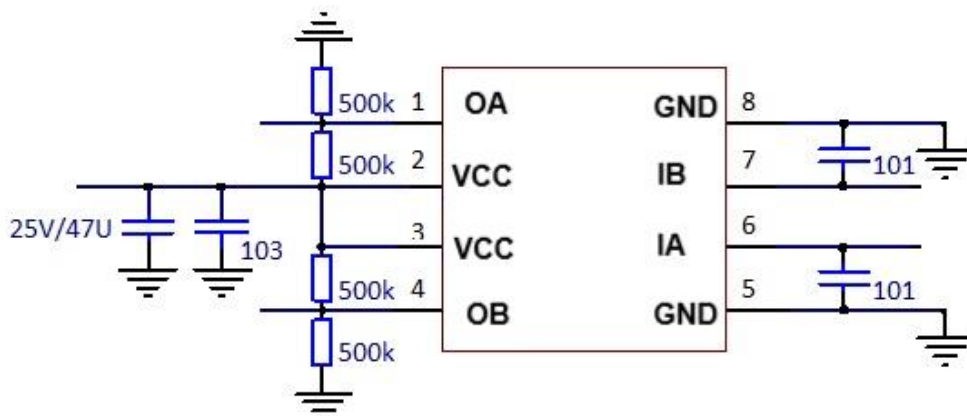
| 特性 | 数值 | 单位 |
|-----------------|----------|----|
| 电源电压,VCC to GND | 5~9 | V |
| 输出电流范围 | 0 to 0.5 | A |
| 工作温度范围 | 0 to 85 | °C |

电气特性

除非另有说明，否则 VCC=5V, Ta=25°C

| 参数 | 单位 | 测试条件 | 最小 | 典型 | 最大 |
|--------|----|---------------------------|-----|------|------|
| Icc1 | uA | IA=IB=0 | | 0.1 | 5 |
| Icc2 | mA | IA=5V, IB=0 或 IA=0, IB=5V | | 20 | 30 |
| Iin | uA | IA=5V | | 360 | 500 |
| Vccmin | V | Iout=100mA | | 2.5 | |
| V0sat1 | V | Iout=500mA | | 1.05 | 1.15 |
| V0sat2 | V | VCC=9V, Iout=750mA | | 1.3 | 1.6 |
| Iout | mA | 持续输出电流 | 750 | 800 | |
| Imax | A | 峰值电流 | | 1.5 | |
| IH | V | 输入高电平 | 1.5 | | |
| IL | V | 输入低电平 | | | 0.6 |

测试电路





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