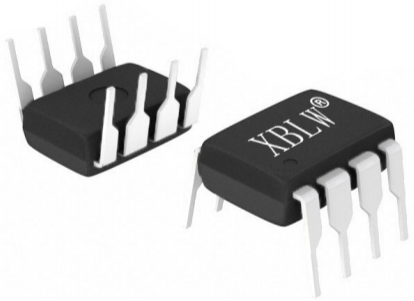
概述

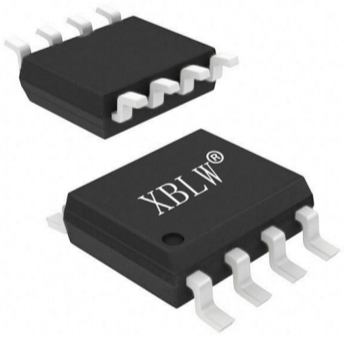
L9110是为控制和驱动电机设计的两通道推挽式功率放大专用集成电路，将分立电路集成在单片 IC 中，使外围器件简单，整机成本降低的同时可靠 性大大提高。芯片有两个 TTL/CMOS 兼容电平的输入，具有良好的抗干扰性；两个输出 端能直接驱动电机的正反向运动，它具有较大的电流驱动能力，每通道能通过 800mA 的持续电流，峰值电流能力可达 1.5A；同时它具有较低的输出饱和压降。内置的钳位二极管能释放感性负载的反向冲击电流，使它在驱动继电器、直流电机、步进电机或开关功率管的使用上安全可靠。

L9110 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。

L9110采用SOP-8和DIP-8封装形式。



DIP-8



SOP-8

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
- 工作温度：-20~85°C

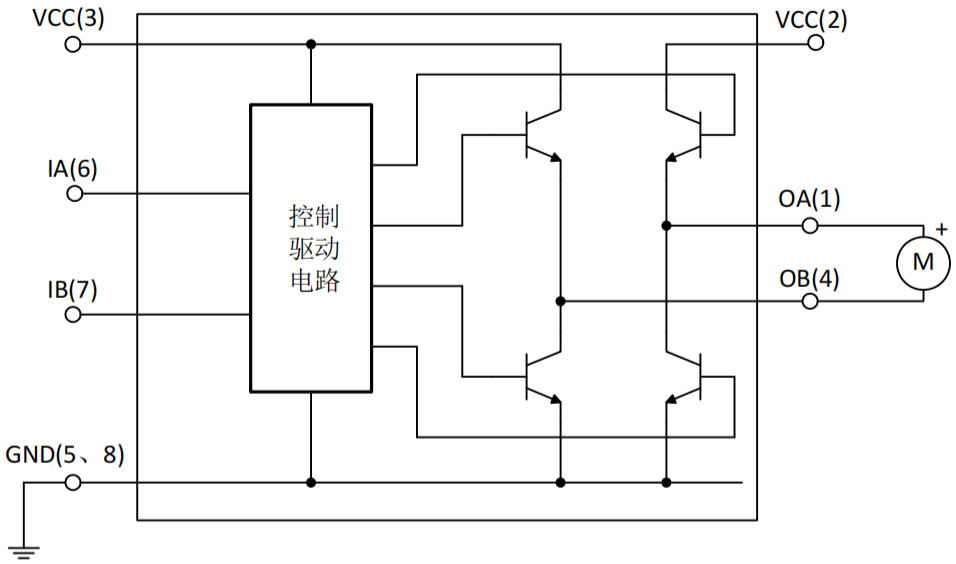
应用

- 玩具
- 电子锁
- 阀门驱动

订购信息

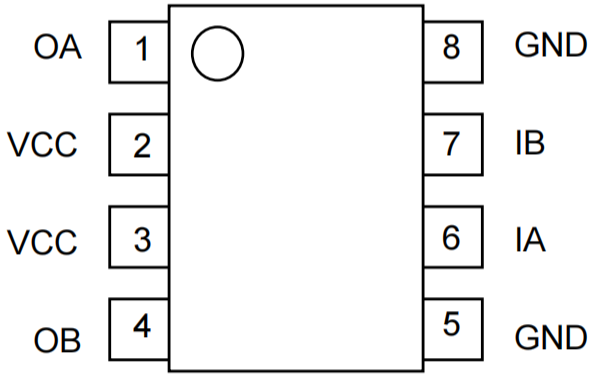
产品型号	封装	丝印	包装	包装数量
L9110S	SOP-8	L9110S	编带	4000只/盘
L9110H	DIP-8	L9110H	管装	2000只/盒

逻辑框图



引脚排列

DIP-8/SOP-8
(Top View)



引脚功能

名称	管脚	I/O	功能描述
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

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

参数	数值			单位
	最小	典型	最大	
电源电压,VCC to GND	2.5	5.0	15	V
输入电压范围	-0.3	-	9.0	V
输入电流范围	-	-	10	mA
工作温度范围	-20	-	85	° C
结温	-	-	150	° C
储存温度范围	-65	-	150	° C
焊接温度（10s）	-	-	260	° C

推荐工作条件

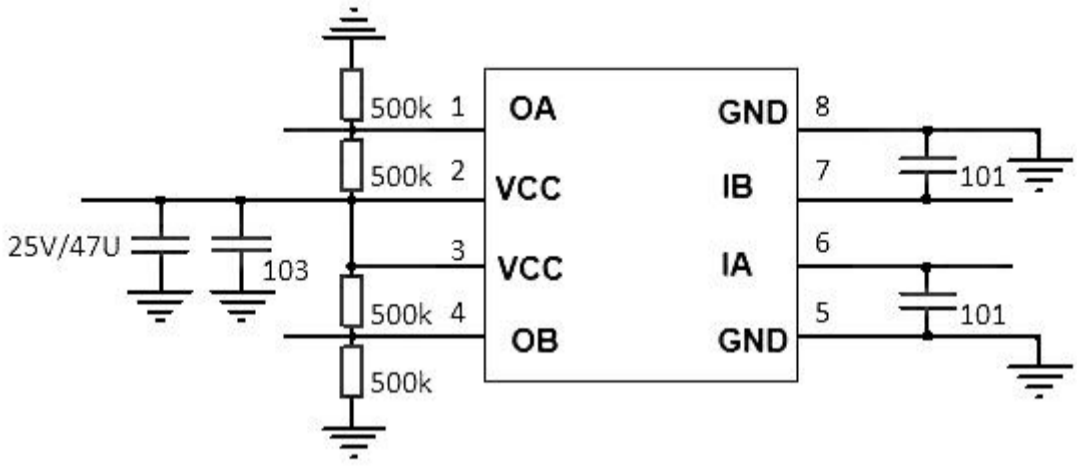
参数	数值			单位
	最小	典型	最大	
电源电压,VCC to GND	2.5	5.0	9	V
输出电流范围	0	-	800	mA
工作温度范围	-20	-	85	° C

电气特性

除非另有说明，否则 V_{CC}=5V， Ta=25°C

参数	测试条件	最小	典型	最大	单位
Icc1	IA=IB=0		0.1	5	uA
Icc2	IA=5V，IB=0 或 IA=0，IB=5V		20	30	mA
Iin	IA=5V		360	500	uA
Vccmin	Iout=100mA		2.5		V
VOsat1	Iout=500mA		1.05	1.15	V
VOsat2	VCC=9V，Iout=750mA		1.3	1.6	V
Iout	持续输出电流	750	800		mA
Imax	峰值电流		1.5		A
IH	输入高电平	1.5			V
IL	输入低电平			0.6	V

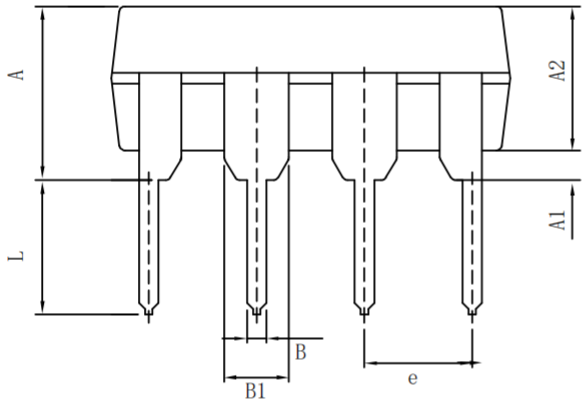
测试电路

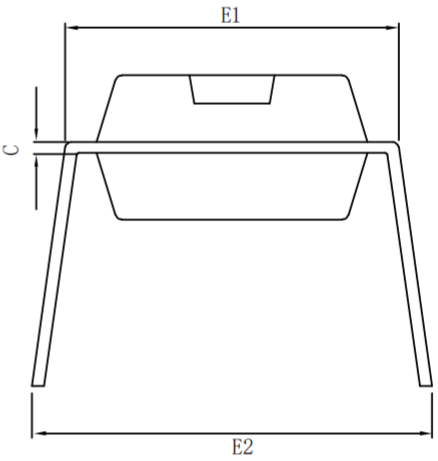

500k
1
OA
GND
8
500k
2
VCC
IB
7
101
25V/47U
103
3
VCC
IA
6
500k
4
OB
GND
5
101
500k

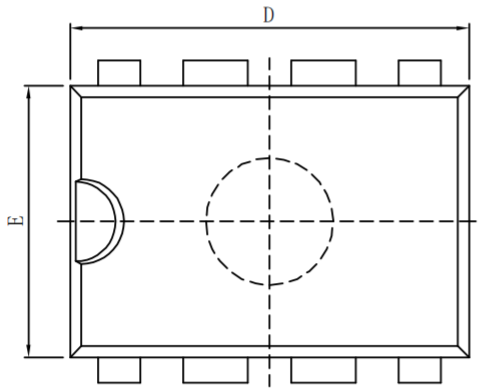
Package Information

- DIP-8

Symbol \ Size	Dimensions In Millimeters		Symbol \ Size	Dimensions In Inches	
	Min(mm)	Max(mm)		Min(in)	Max(in)
A	3.710	4.310	A	0.146	0.170
A1	0.510		A1	0.020	
A2	3.200	3.600	A2	0.126	0.142
B	0.380	0.570	B	0.015	0.022
B1	1.524(BSC)		B1	0.060(BSC)	
C	0.204	0.360	C	0.008	0.014
D	9.000	9.400	D	0.354	0.370
E	6.200	6.600	E	0.244	0.260
E1	7.320	7.920	E1	0.288	0.312
e	2.540(BSC)		e	0.100(BSC)	
L	3.000	3.600	L	0.118	0.142
E2	8.400	9.000	E2	0.331	0.354

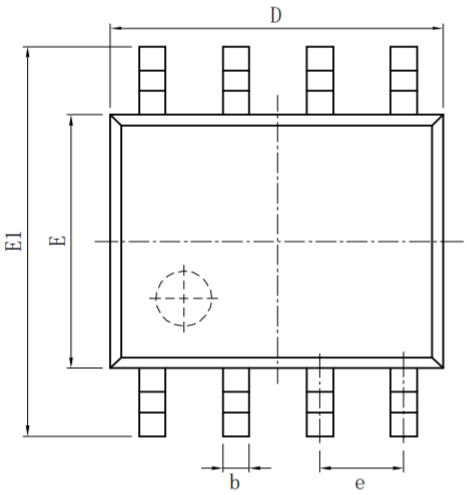


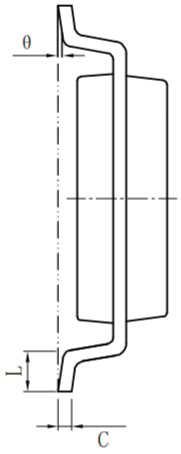


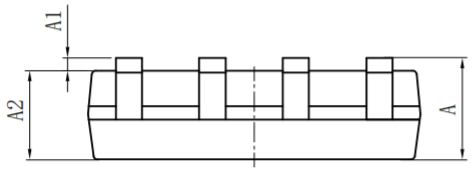


- SOP-8

Size / Symbol	Dimensions In Millimeters		Size / Symbol	Dimensions In Inches	
	Min(mm)	Max(mm)		Min(in)	Max(in)
A	1.350	1.750	A	0.053	0.069
A1	0.100	0.250	A1	0.004	0.010
A2	1.350	1.550	A2	0.053	0.061
b	0.330	0.510	b	0.013	0.020
c	0.170	0.250	c	0.006	0.010
D	4.700	5.100	D	0.185	0.200
E	3.800	4.000	E	0.150	0.157
E1	5.800	6.200	E1	0.228	0.224
e	1.270(BSC)		e	0.050(BSC)	
L	0.400	1.270	L	0.016	0.050
θ	0°	8°	θ	0°	8°







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