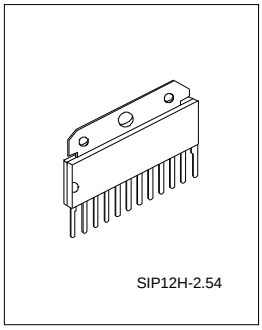
DUAL 5W BTL AUDIO POWER AMPLIFIER CIRCUIT



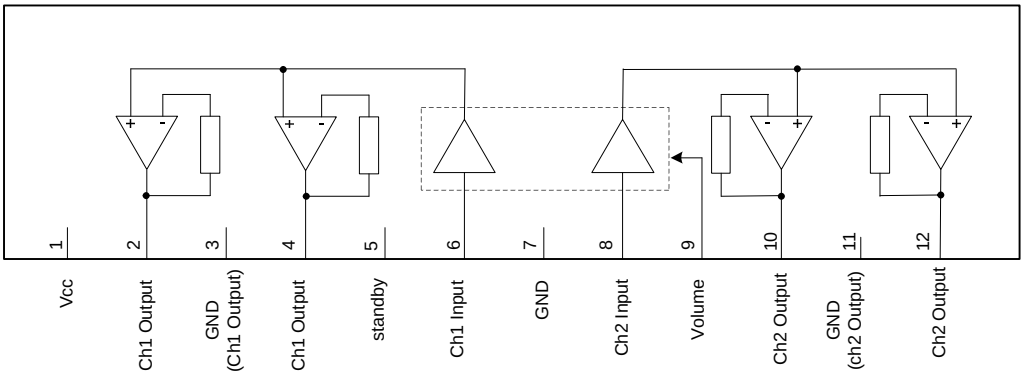
FEATURES

- Vcc=11V,output=5W(8Ω)
- Built-in standby function
- Built-in DC volume circuits

APPLICATIONS

- TVs, audio equipment, personal computers, active speakers

BLOCK DIAGRAM



PIN DESCRIPTION

Pin No.	Function	Pin No.	Function
1	Vcc	7	GND(Input)
2	Ch1 Output(+)	8	Ch2 Input
3	GND(Output ch1)	9	DC Volume
4	Ch1 Output(-)	10	Ch2 Output(-)
5	Standby	11	GND(Output ch2)
6	Ch1 Input	12	Ch2 Output(+)

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Value	Unit
Supply Voltage(note2)	V_{CC}	14	V
Supply Current	Icc	2.0	A
Operating Temperature (note1)	T_A	-25 to+70	°C
Storage Temperature(note1)	Tstg	-55 to+150	°C
Power Dissipation(Ta=70°C)	P_d	1920	mW

Note1:Ta=25°Cexcept storage temperature and operating ambient temperature.
Note2: At no-signal.

OPERATING SUPPLY VOLTAGE RANGE

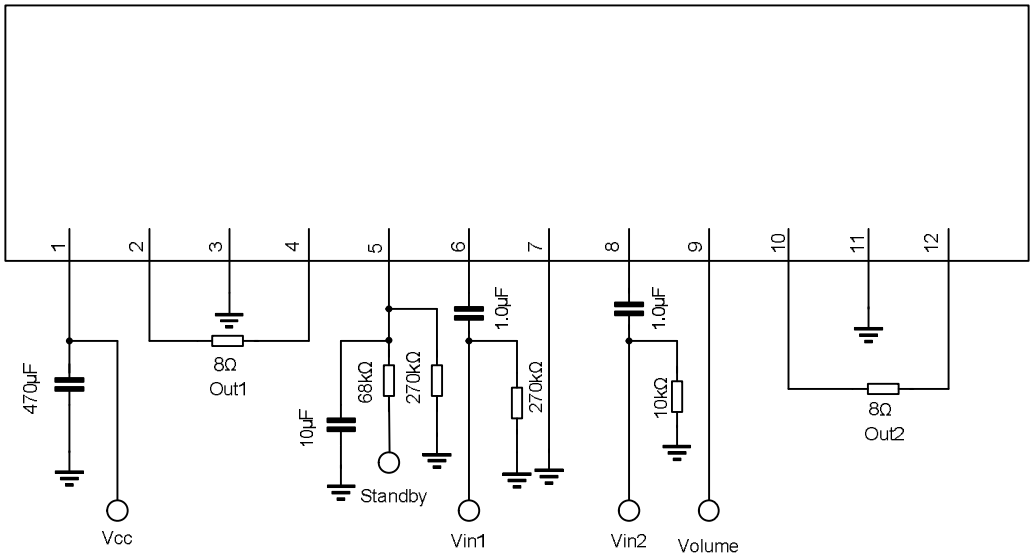
Characteristic	Symbol	Value	Unit
Operating Supply Voltage Range	Vcc	3.5 to13.5	v

ELECTRICAL CHARACTERISTICS(Ta=25°C±2°C,Vcc=5.0V,RL=8Ω,freq=1kHz)

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Quiescent Current	Icq	Vin=0mV,Vol.=0V	-	45	100	mA
Standby Current	Istb	Vin=0mV,Vol.=0V	-	1	10	uA
Output Noise Voltage	Vno	Rg=10kΩ,Vol.=0V	-	0.10	0.4	mVrms
Voltage Gain	Gv	Po=0.25W,Vol.=1.25V	32	34	36	dB
Total Harmonic distortion	THD	Po=0.25W,Vol.=1.25V	-	0.1	0.5	%
Maximum Power Output 1	Po1	THD=10%,Vol.=1.25V	2.4	3.0	-	W
Maximum Power Output 2	Po2	Vcc=11V THD=10%,Vol.=1.25V	4.0	5.0	-	W
Ripple Rejection Ratio	RR	Rg=10kΩ,Vol.=0V Vr=0.5Vrms,fr=120Hz	30	50	-	dB
Output Offset Voltage	Voff	Rg=10kΩ,Vol.=0V	-250	0	250	mV
Maximum attenuation	Att	Po=0.25W,Vol.=0V	70	90	-	dB
Input Impedance	Zi	Vin= ± 0.3Vdc	24	30	36	kΩ
Channel Balance1	CB1	Po=0.25W,Vol.=1.25V	-1	0	1	dB
Channel Balance 2	CB2	Po=0.25W,Vol.=0.6V	-3	0	3	dB
Center Voltage Gain	Gvm	Po=0.25W,Vol.=0.6V	21	24	27	dB
Channel crosstalk	CT	Po=0.25W,Vol.=1.25V	44	55	-	dB

Note1: For this measurement, use the filter<Bandwidth:15Hz to 30KHz(12dB/octave)>

APPLICATION CIRCUIT



PACKAGE OUTLINE

SIP-12H-2.54 UNIT: mm