

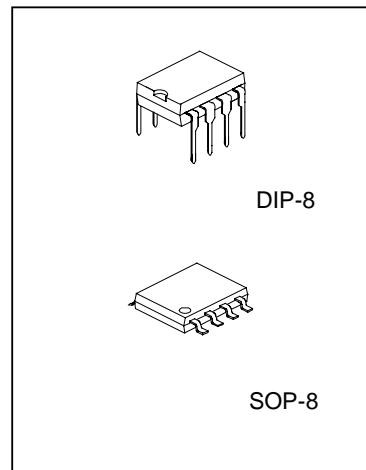
CLASS AB STEREO HEADPHONE DRIVER

DESCRIPTION

The SC1308L is a Class AB stereo headphone driver chip utilizing CMOS Technology specially designed for portable digital audio applications. It is housed in an 8-pin DIP or SO package and is functionally compatible with TDA1308. Pin assignment and application circuits are optimized for lower cost effectiveness and easy PCB Layout.

FEATURES

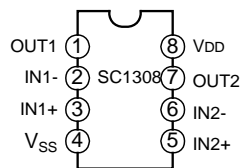
- Wide temperature range
- CMOS Technology
- Excellent power supply ripple rejection
- Low power consumption
- High signal-to-noise ratio, S/N=110dB
- Low harmonic distortion
- Large output voltage swing.
- Low supply voltage available



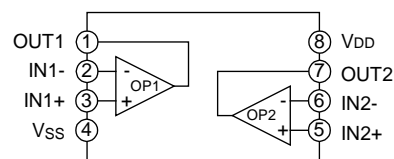
APPLICATIONS

- Portable digital audio
- Hi-fi audio system
- Walkman
- CD-ROM

PIN CONFIGURATIONS



BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATING

Characteristic	Symbol	Value	Unit
Supply Voltage	VDD	8	V
Storage temperature	TSTG	-65 ~ +150	°C
Operating Temperature	TOPR	-40 ~ + 80	°C

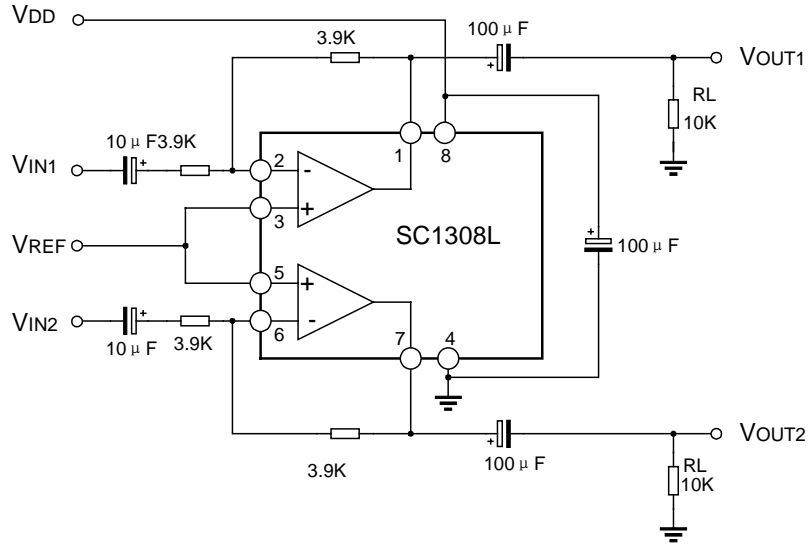
ELECTRICAL CHARACTERISTICS (Tamb=25°C, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Single power supply	VDD		2	3	4	V	
Dual power supply			+1.0	+1.5	+2.0		
Single power supply	VSS		0	0	0	V	
Dual power supply			-1.0	-1.5	-2.0		
Supply current	IDD	No load VDD=3V	--	2	--	mA	
Power dissipation	PD	No load VDD=3V		15		mW	
Maximum output power	PO	THD=0.15%	VDD=1.8V	--	4	--	mW
			VDD=3V	--	15	--	
		THD=3%	VDD=1.8V	--	5	--	
			VDD=3V	--	20	--	
Total harmonic distortion	THD	VO(p-p)=2V		0.03	0.06	%	
		VO(p-p)=2V, RL=5KΩ		0.001			
Single-to-noise ratio	S/N		100	110		dB	
Channel separation	CS			70		dB	
		RL=5K Ohms		105			
Power supply ripple rejection	PSRR	F=100Hz, Vripple(p-p)=100mV		90		dB	

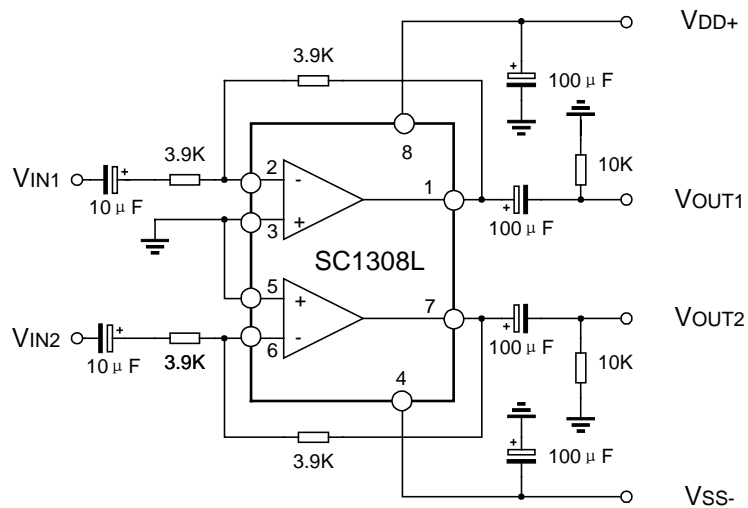
PIN DESCRIPTION

PIN No.	Symbol	I/O	Description
1	OUT1	O	Output pin 1
2	IN1-	I	Inverting input pin 1
3	IN1+	I	Non-inverting input pin 1
4	VSS	--	Negative power supply
5	IN2+	I	Non-inverting input pin 2
6	IN2-	I	Inverting input pin 2
7	OUT2	O	Output pin 2
8	VDD	--	Positive power supply

TYPICAL APPLICATION CIRCUIT



Single power supply



Dual power supply

OUTLINE PACKAGE

