



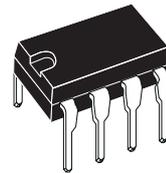
TDA8199

STEREO AMPLIFIER AND DC VOLUME CONTROL FOR TV

- Stereo Circuit
- DC Volume Control
- 12dB Maximum Gain

DESCRIPTION

The TDA8199 is a monolithic integrated circuit in DIP8 package intended for TV applications.



**DIP8
(Plastic Package)**

ORDER CODE: TDA8199

Figure 1. Pin Connections

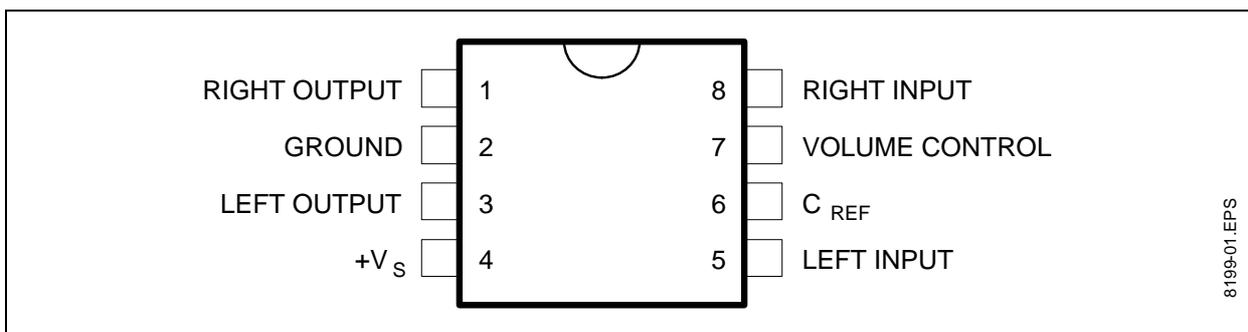
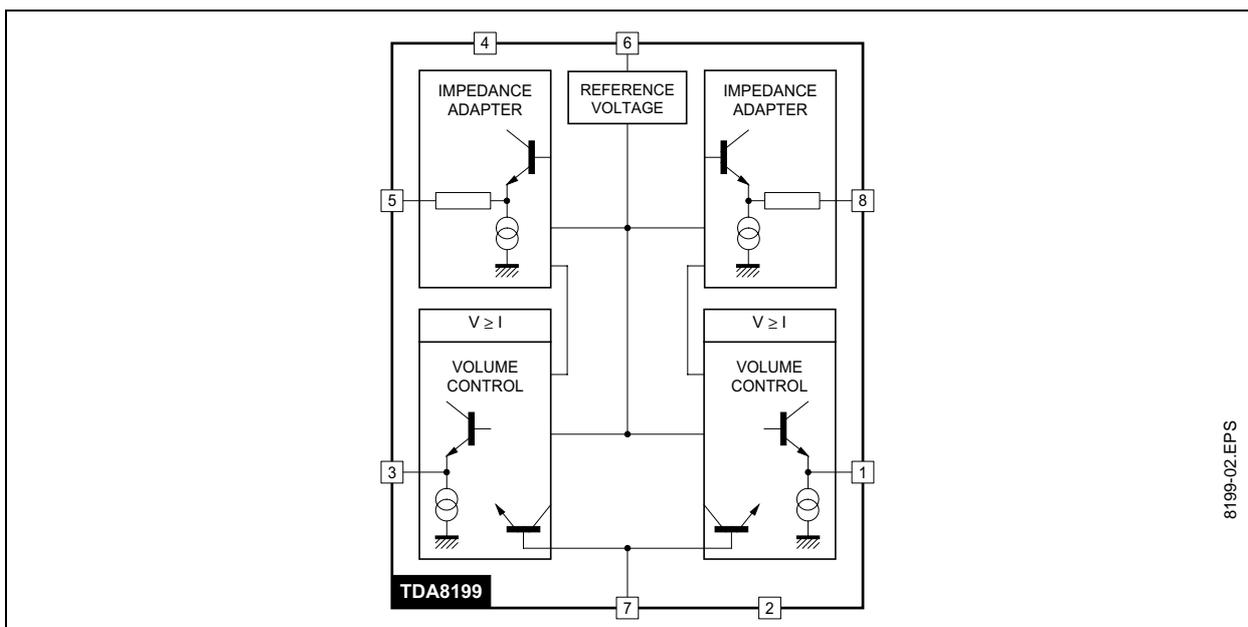


Figure 2. Block Diagram



TDA8199

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_S	Supply Voltage (pin 1)	16	V
T_{stg}	Storage Temperature	- 55 to 125	°C
T_{oper}	Operating Ambient Temperature	0 to 70	°C

ELECTRICAL CHARACTERISTICS

Measured according to the following conditions, unless otherwise specified : $T_{amb} = 25^{\circ}\text{C}$, $V_S = +12\text{V}$.

Symbol	Parameter	Min.	Typ.	Max.	Unit
V_S	Supply Voltage	10.8	12	13.2	V
I_S	Supply Current ($V_{IN} = 0$, $V_C = 0.5\text{V}$)		21	28	mA
V_{REF}	Reference Voltage		6.9		V
V_i	Audio Input Amplitude		0.125	0.5	V_{RMS}
THD1	Distortion for $V_i = 0.25 V_{RMS}$ at Max. Volume		0.35	1	%
THD2	Distortion for $V_O = 2 V_{RMS}$			5	%
DK	DC Volume Control Range at $V_i = 0.5 V_{RMS}$	70	90		dB
Kmin	Output/Input Gain for Max. Volume ($V_C = 5\text{V}$)		12		dB
dK	Gain Difference between Channels at $V_C = 5\text{V}$		0		dB
C_C	Crosstalk between Channels ($R_L > 10\text{k}\Omega$ and $F = 1\text{kHz}$)		70		dB
R_i	Audio Input Resistance		22		$\text{k}\Omega$
R_O	Audio Output Resistance		0.3	1	$\text{k}\Omega$
	Output Noise Level at $V_C = 5\text{V}$ (weighted curve : DIN45405)		300		μV_{RMS}
	Volume Control Input Current (Pin 7) at $V_C = 0\text{V}$		- 25		μA
	Volume Thermal Stability ($K = 30\text{dB}$, $0 < T_{amb} < 60^{\circ}\text{C}$)		0.04		$\text{dB}/^{\circ}\text{C}$

Figure 3. Gain versus Volume Control

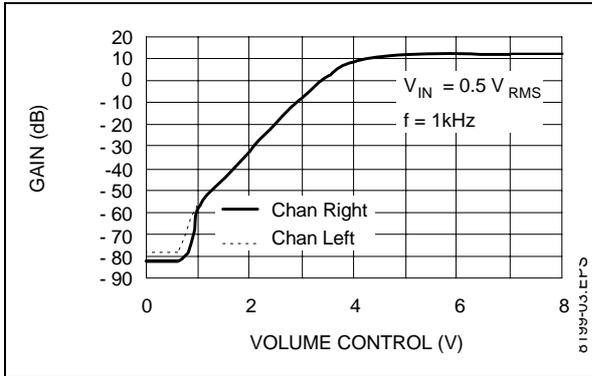


Figure 5. Distortion versus Volume Control

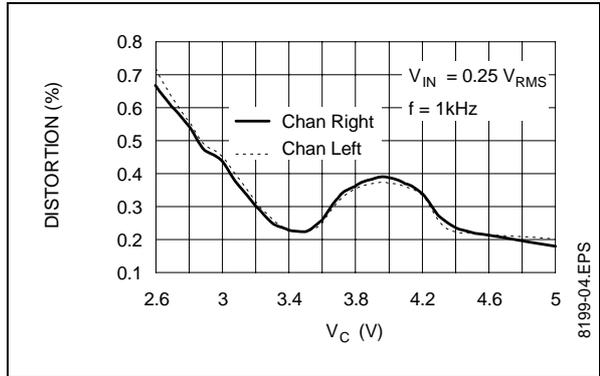


Figure 4. Distortion Rate versus Voltage Input

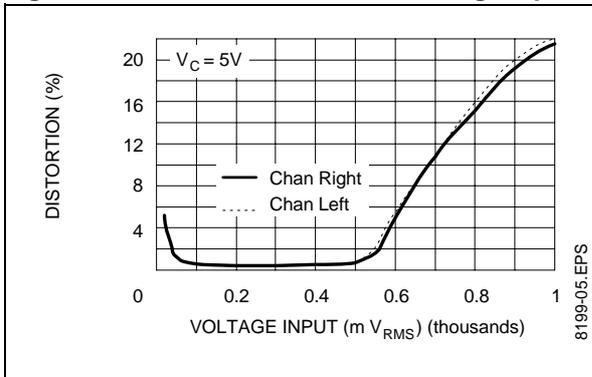


Figure 6. Supply Voltage Rejection

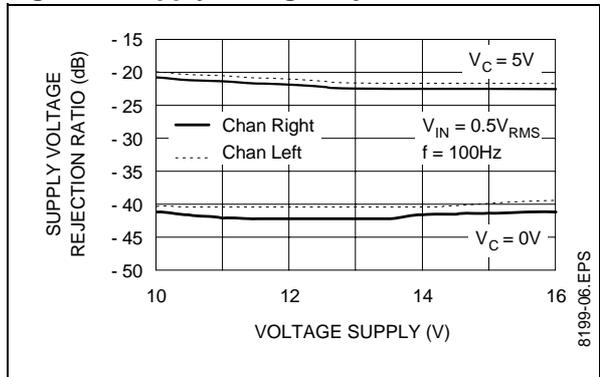
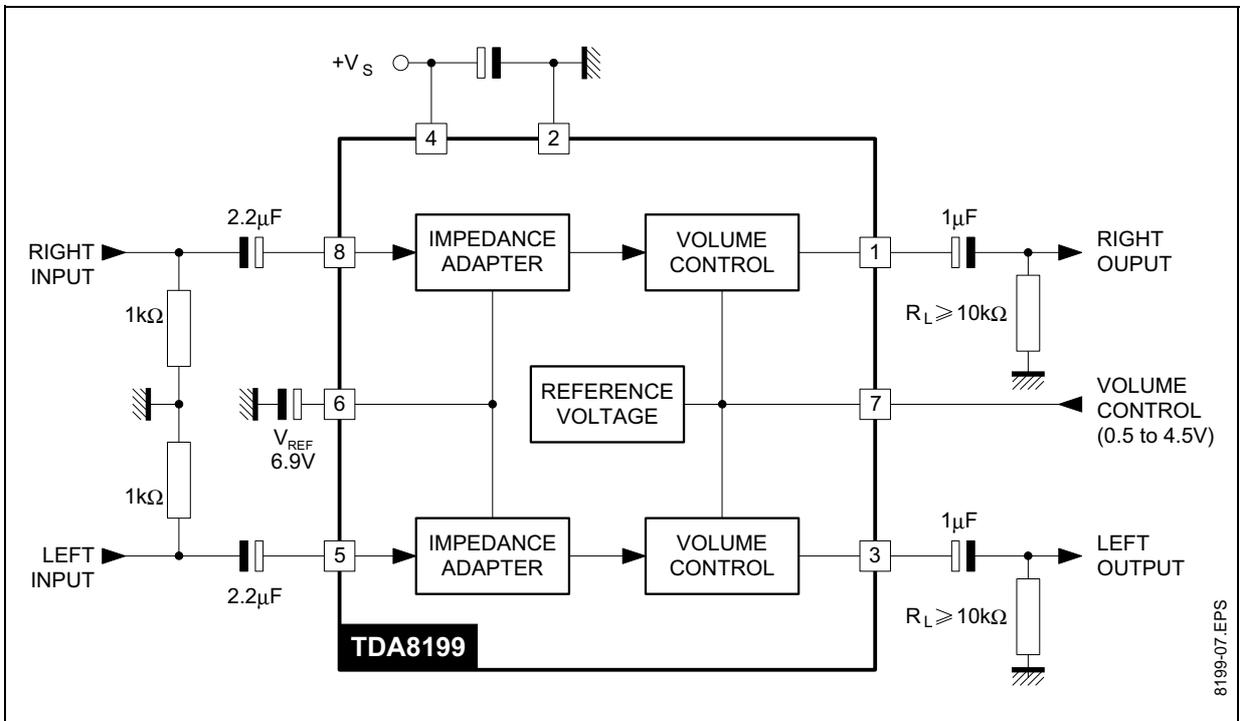


Figure 7. Application Diagram

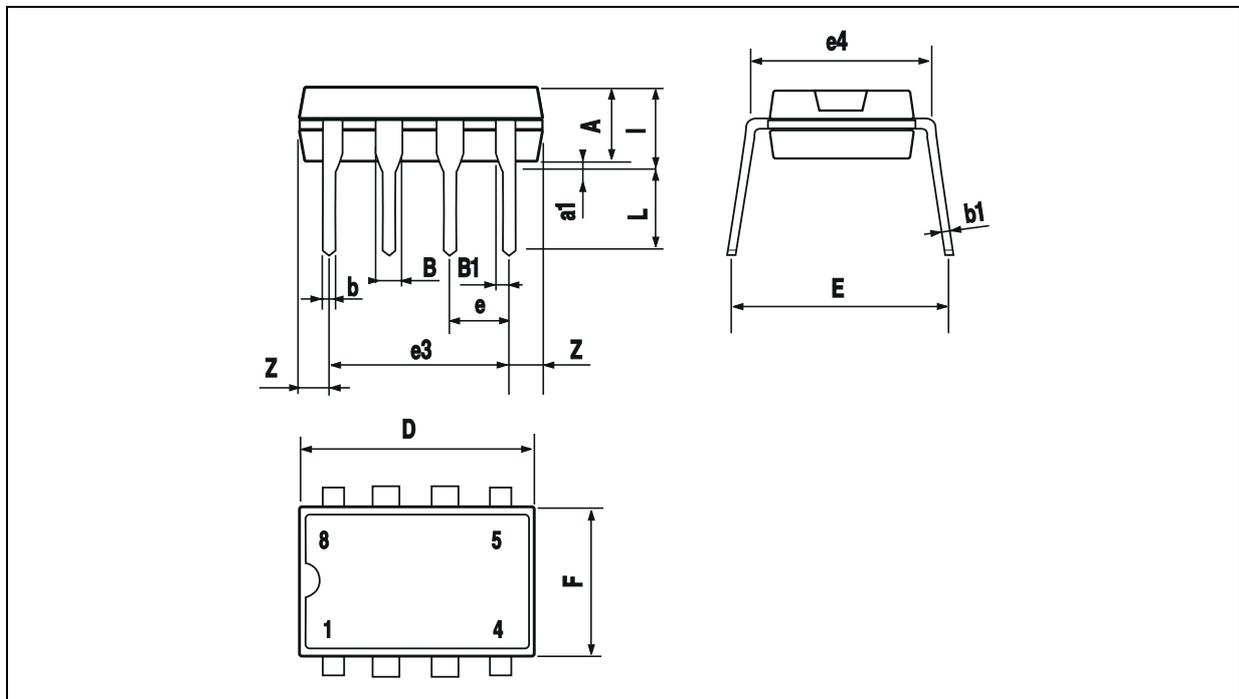


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PACKAGE MECHANICAL DATA

8-PINS - PLASTIC DIP

Figure 8. 8-Pin Package



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