

0.72W AUDIO POWER AMPLIFIER—YD1001

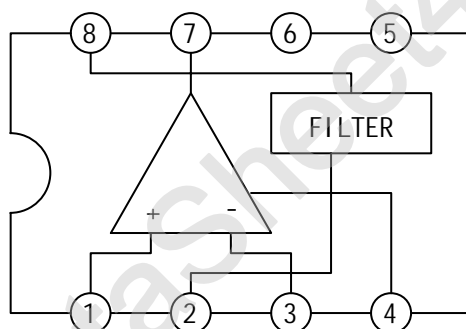
DESCRIPTION

The YD1001 is suitable for audio power amplifier of portable cassette tape recorder and radio.

FEATURES

- *Very few external components (only three capacitors).
- *Low quiescent current.
- *High Voltage Gain: $G_v=40\text{dB}$.

BLOCK DIAGRAM



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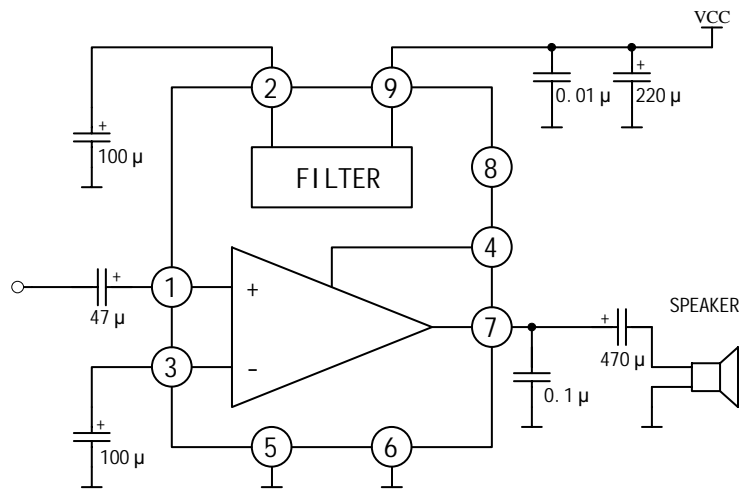
ABSOLUTE MAXIMUM RATINGS (Tamb=25)

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	Vcc	14	V
Power Dissipation	Pd	900	mW
Operating Temperature	Topr	-20 to +75	
Storage Temperature	Tstg	-55 to +150	

ELECTRICAL CHARACTERISTICS (Tamb=25 ,Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Quiescent Circuit Current	Iccq	Vcc=3V,Vi=0		5.5		mA
		Vcc=6V,Vi=0		6.6	15	mA
		Vcc=9V,Vi=0		7.5	18	mA
Output Power	Po	Vcc=3V, RL=4 , THD=10%		120		mW
		Vcc=6V, RL=4 , THD=10%	500	720		mW
		Vcc=6V, RL=8 , THD=10%	300	450		mW
		Vcc=9V, RL=8 , THD=10%	800	1100		mW
		Vcc=9V, RL=16 , THD=10%	450	610		mW
Total Harmonic Distortion	THD	Po=100mW		0.3	1.0	%
Voltage Gain	Gv	Vi=0.5mVrms	37	40	43	dB
Input Resistance	Zi			27		k
Output Noise Voltage	VNO	Rg=10k , BPF=20Hz~20kHz		0.2	0.5	mV
Ripple Rejection	RR	fr=100Hz, Vr=0.3Vrms, without Crip		25		dB

APPLICATION CIRCUIT



OUTLINE DRAWING

