

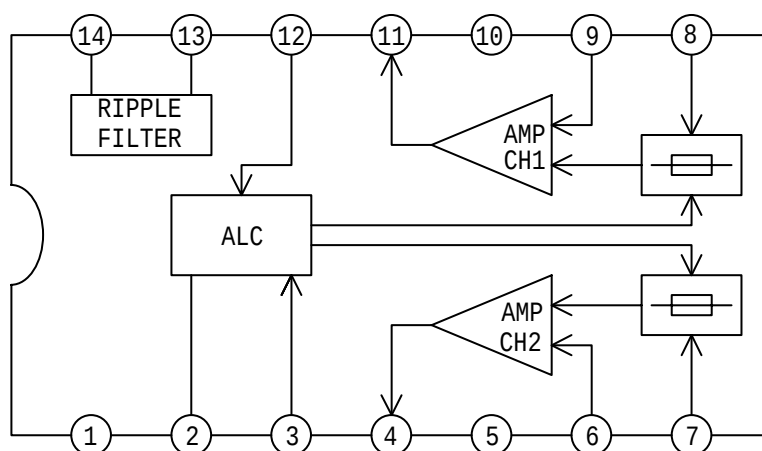
DESCRIPTION

The IT7312 is a monolithic integrated circuit designed for dual pre-amplifier circuit with ALC for recording/playback amplifier of cassette tape recorder.

FEATURES

- *High open loop gain
- *Incorporates ALC detector circuit
- *No input coupling condenser
- *Low noise and current consumption
- *Wide ALC range
- *Wide operating voltage range: $V_{cc}=5V\sim 12V$
- *Low power on shock noise

BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS (Tamb=25°C)

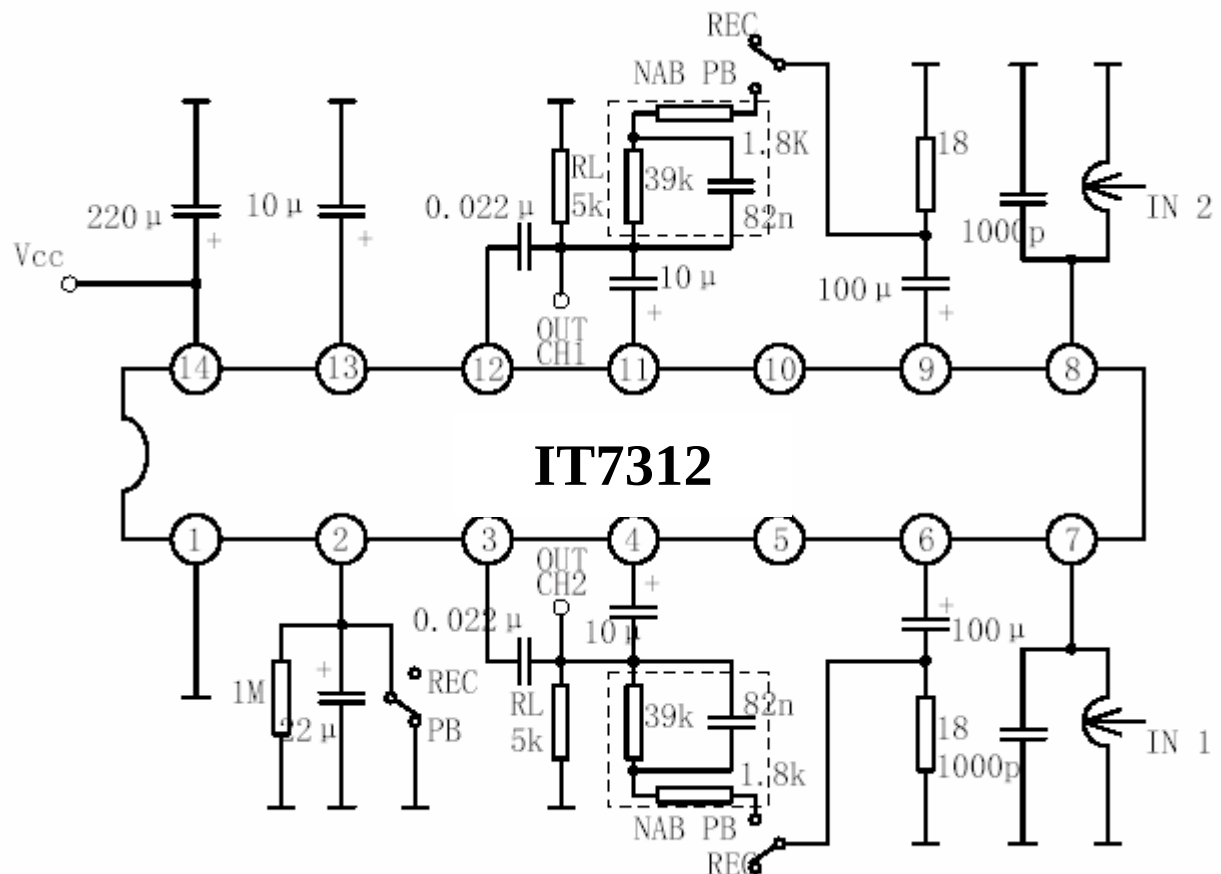
CHARACTERISTIC	SYMBOL	VALUE	UNIT
Supply Voltage	V _{cc}	14	V
Supply Current	I _{cc}	50	mA
Power Dissipation	P _D	700	mW
Operating Temperature	T _{opr}	-55 to +125	°C
Storage Temperature	T _{str}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS

(Tamb=25°C, V_{cc}=6V, f=1KHz, unless otherwise specified)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Quiescent Current	I _{ccq}	V _{in} =0	2.5	4.5	8.0	mA
Operating Voltage	V _{cc}		5.0		12.0	V
Closed Loop Voltage Gain	G _v	V _o =0.5V	66	69	72	dB
Total Harmonic Distortion	THD	V _o =0.5V		0.5	1.0	%
Output Voltage	V _o	THD=1%	1.2	1.6		V
Output Noise Voltage	V _{NO}	R _g =0(internal resistance 1.5kΩ DIN/Audio)		2.0	5.0	mV
ALC Voltage	V _{ALC}	V _{in} =400 μ V	0.55	0.63	0.7	V
ALC Width	W _{ALC}	Beginning 0dB to 3dB	35	47		dB
ALC Balance	Δ G _v	V _o =0.5V	-1	0	+1	dB

APPLICATION CIRCUIT



OUTLINE DRAWING

DIP-14

unit:mm

