

UTC7312

LINEAR INTEGRATED CIRCUIT

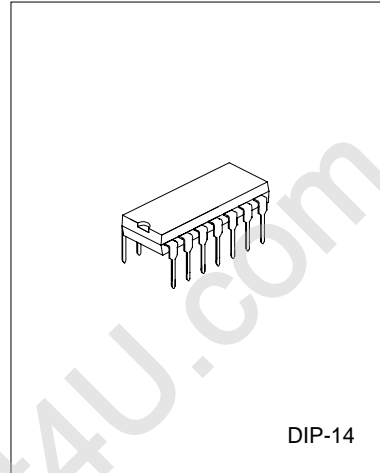
DUAL RECORDING/PLAYBACK PRE-AMPLIFIER CIRCUIT WITH ALC

DESCRIPTION

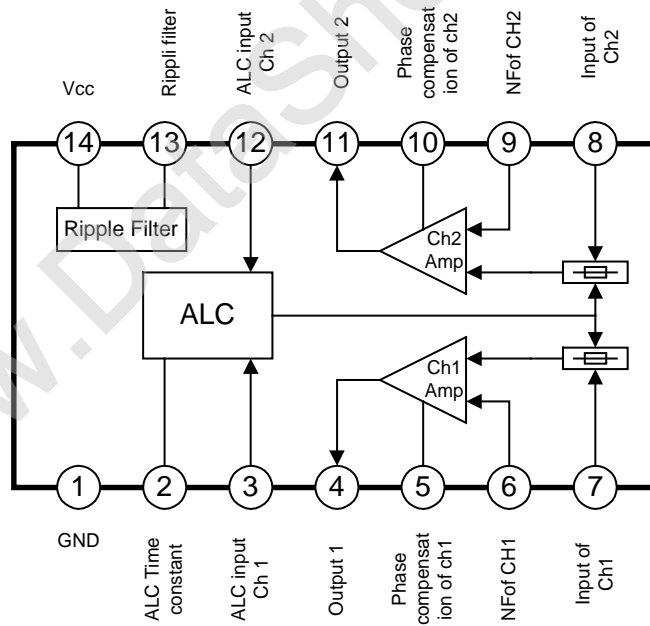
The UTC7312 is a monolithic integrated circuit designed for dual pre-amplifier circuit with ALC for record /playback amplifier of cassette tape recorder.

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(Ta=25°C)

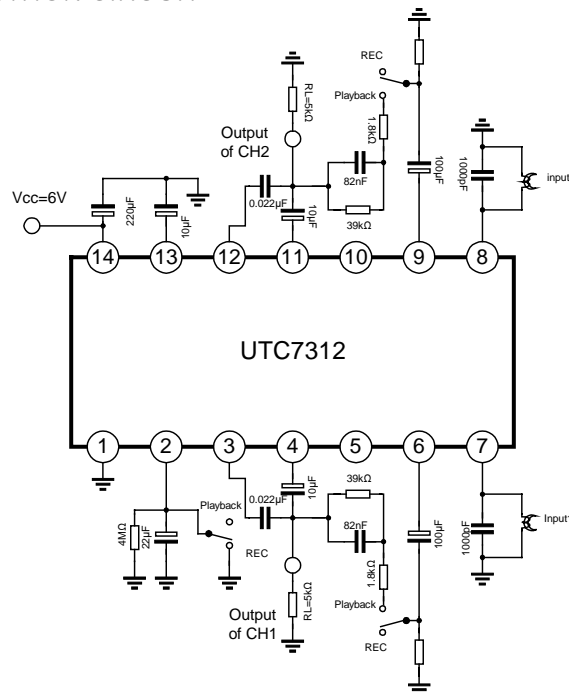
Characteristic	Symbol	Value	Unit
Supply Voltage	Vcc	14	V
Supply Current	Icc	50	mA
Power Dissipation	Pd	700	mW
Operating Temperature	Topr	-55 to 125	°C
Storage Temperature	Tstr	-65 to 150	°C

ELECTRICAL CHARACTERISTICS

(Ta=25°C , Vcc=6V, f=1kHz, RL=5.1kΩ, unless otherwise specified)

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Quiescent current	IccQ	Vi=0	2.5	4.5	8.0	mA
Operating voltage	Vcc		5.0		12.0	V
Closed-loop Voltage Gain	Gvc	Vo=0.5V	66	69	72	dB
Total Harmonic Distortion	THD	Vo=0.5V		0.5	1.0	%
Output Voltage	Vo	THD=1%	1.2	1.6		V
Output noise Voltage	Vno	Rg=0(internal resistance 1.5kΩ) DIN/Audio		2.0	5.0	mV
ALC Voltage	VALC	Vin=400μV	0.55	0.63	0.7	V
ALC Width	WALC	Beginning 0dB to 3dB	35	47		dB
Channel Balance	CB	Vo=0.5V, CB=Gv1-Gv2	-1	0	+1	dB

TYPICAL APPLICATION CIRCUIT



TYPICAL PERFORMANCE CHARACTERISTICS

