

UTC2822

LINEAR INTEGRATED CIRCUIT

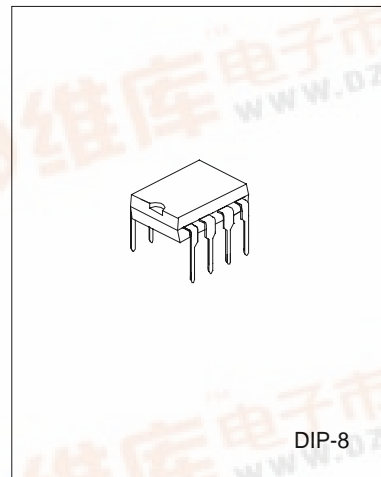
DUAL LOW VOLTAGE POWER AMPLIFIER

DESCRIPTION

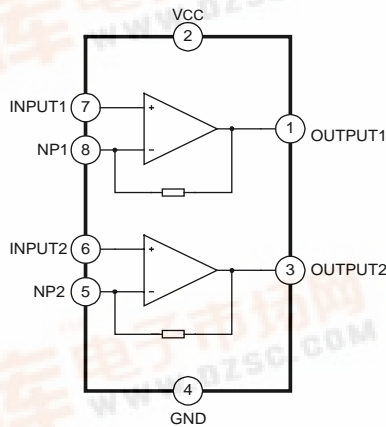
The UTC2822 is a monolithic integrated audio amplifier in a 8-Pin plastic Dual in line package. It is designed for portable cassette players and radios.

FEATURES

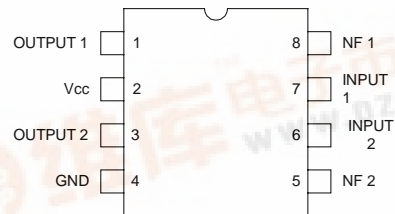
- *Wide operating supply voltage: Vcc=1.8V- 12V
- *Low crossover distortion
- *Low quiescent circuit current
- *bridge/stereo configuration



BLOCK DIAGRAM



PIN CONFIGURATION



ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Value	Unit
Supply Voltage	Vcc	15	V
Output Peak Current	Io(peak)	1	A
Power Dissipation	Pd	at Tamb=50°C 1.0 at Tcase=50°C 1.4	W
Operating Temperature	Topr	-20~+70	°C
Storage Temperature	Tstg	-40~+150	°C

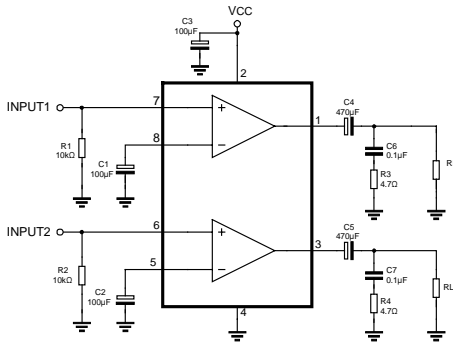


ELECTRICAL CHARACTERISTICS

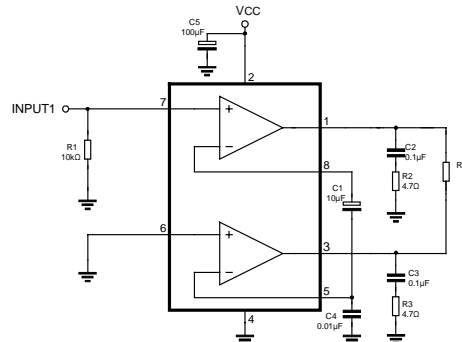
(Ta=25°C, Vcc=6V, f=1kHz, unless otherwise specified)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Units
Operating Supply Voltage	Vcc		1.8			V
Quiescent Circuit Current	Icc	Vi=0		9		mA
Closed Loop Voltage Gain	Av	Stereo		40		dB
Closed Loop Voltage Gain	Av	Bridge		40		dB
Channel Balance	CB	Stereo	-1	0	1	dB
Output Power	Po	Stereo, Vcc=6V, RL=4Ω, THD=10%	0.4	0.65		W
Output Power	Po	Stereo, Vcc=3V, RL=4Ω, THD=10%		0.11		W
Output Power	Po	Bridge, Vcc=6V, RL=4Ω, THD=10%	0.9	1.35		W
Output Power	Po	Bridge, Vcc=3V, RL=4Ω, THD=10%		0.35		W
Total Harmonic Distortion	THD	Stereo, RL=8Ω, Po=0.2W		0.5		%
Total Harmonic Distortion	THD	Bridge, RL=8Ω, Po=0.5W		0.5		%
Ripple Rejection	RR	Stereo, f=100Hz, C3=100μF	24	30		dB
Output Noise Voltage	VNO	Stereo, BW(-3dB)=20Hz~20kHz		0.5	2.0	mV
Cross Talk	CT	Stereo, f=1kHz		50		dB
Input Resistance	Ri		100			k Ω

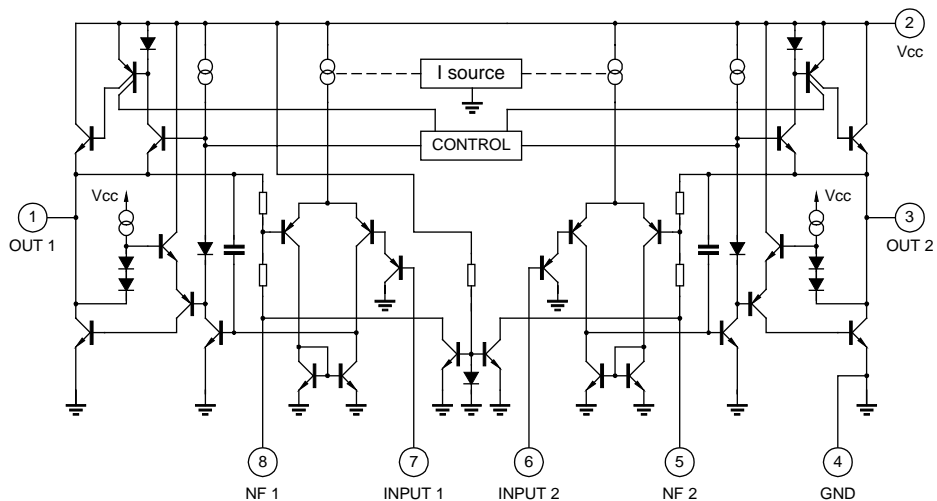
TEST CIRCUIT 1: STEREO



TEST CIRCUIT 2: BRIDGE



SCHEMATIC DIAGRAM



TYPICAL PERFORMANCE CHARACTERISTICS

