

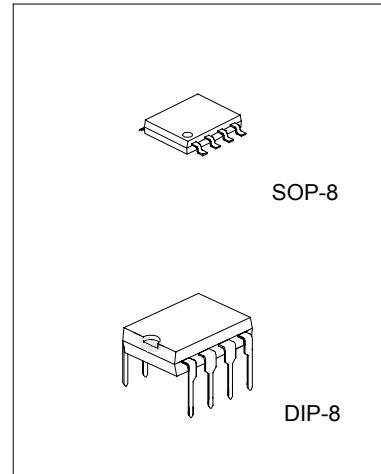
DUAL LOW VOLTAGE POWER AMPLIFIER

DESCRIPTION

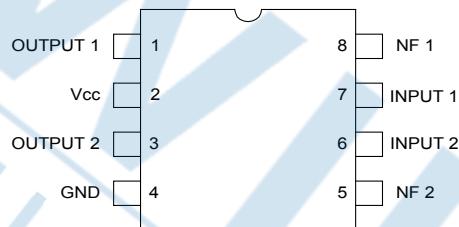
The TDA2822M is a monolithic integrated audio amplifier in a 8-Pin plastic dual in line package. It is designed for portable cassette players and radios.

FEATURES

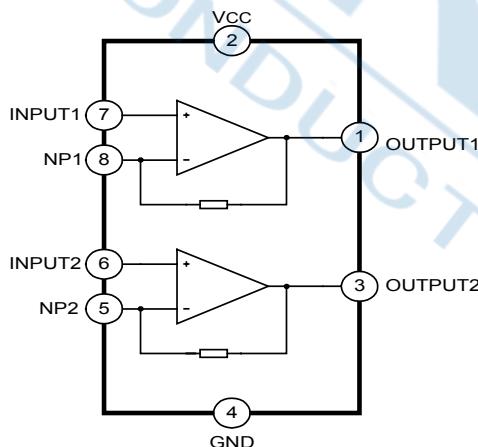
- *Wide operating supply voltage:Vcc=1.8V- 12V.
- *Low crossover distortion.
- *Low quiescent circuit current.
- *Bridge/stereo configuration.



PIN CONFIGURATIONS



BLOCK DIAGRAM



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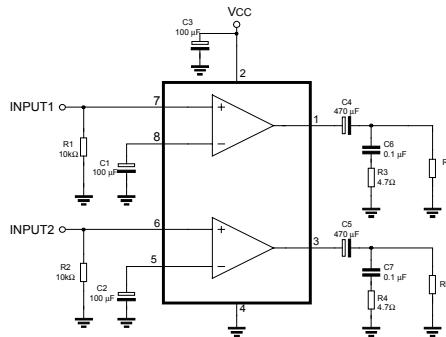
ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	Vcc	13	V
Output Peak Current	I _{o(peak)}	1	A
Power Dissipation	P _d	DIP at $T_{amb}=50^\circ\text{C}$ 1.0 SOP at $T_{amb}=50^\circ\text{C}$ 0.5	W
Operating Temperature	T _{opr}	-20 ~ +70	°C
Storage Temperature	T _{stg}	-40 ~ +150	°C

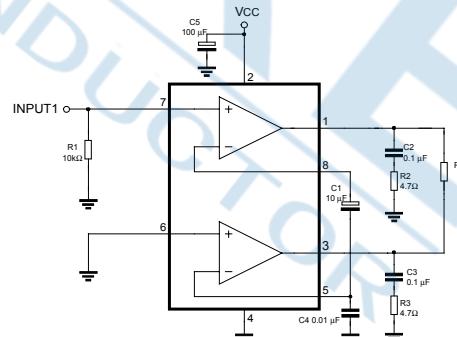
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$, $VCC=6\text{V}$, $f=1\text{kHz}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Operating Supply Voltage	Vcc		1.8		12	V
Quiescent Circuit Current	I _{cc}	$V_i=0$		9		mA
Closed Loop Voltage Gain	A _v	Stereo		40		dB
Closed Loop Voltage Gain	A _v	Bridge		40		dB
Channel Balance	CB	Stereo	-1	0	1	dB
Output Power	P _o	Stereo, $VCC=6\text{V}$, $RL=4\Omega$, THD=10%	0.4(DIP) 0.28(SOP)	0.65(DIP) 0.45(SOP)		W
Output Power	P _o	Stereo, $VCC=3\text{V}$, $RL=4\Omega$, THD=10%		0.11(DIP) 0.07(SOP)		W
Output Power	P _o	Bridge, $VCC=6\text{V}$, $RL=4\Omega$, THD=10%	0.9(DIP) 0.63(SOP)	1.35(DIP) 0.94(SOP)		W
Output Power	P _o	Bridge, $VCC=6\text{V}$, $RL=4\Omega$, THD=10%		0.35(DIP) 0.24(SOP)		W
Total Harmonic Distortion	THD	Stereo, $RL=8\Omega$, $P_o=0.2\text{W}$		0.5		%
Total Harmonic Distortion	THD	Bridge, $RL=8\Omega$, $P_o=0.5\text{W}$		0.5		%
Ripple Rejection	RR	Stereo, $f=100\text{Hz}$, $C_3=100\mu\text{F}$	24	30		dB
Output Noise Voltage	V _{NO}	Stereo, $BW(-3\text{dB})=20\text{Hz}$ $\sim 20\text{kHz}$		0.5	2.0	mV
Cross Talk	CT	Stereo, $f=1\text{kHz}$		50		dB
Input Resistance	R _i		100			kΩ

TEST CIRCUIT 1:STEREO

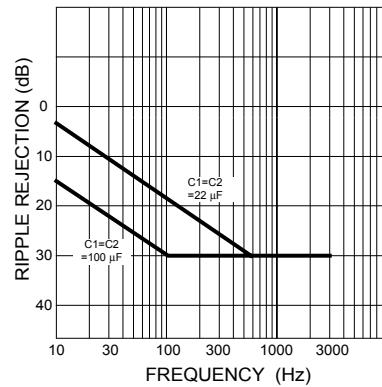
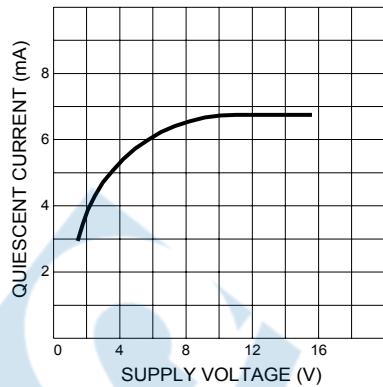


TEST CIRCUIT 2:BRIDGE



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TYPICAL PERFORMANCE CHARACTERISTICS



SCHEMATIC DIAGRAM

