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# TDA2822M(12V) LINEAR INTEGRATED CIRCUIT

## 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.

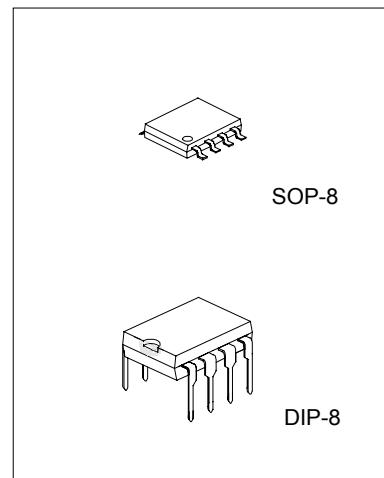
### FEATURES

\*Wide operating supply voltage:  $V_{CC} = 1.8V - 12V$

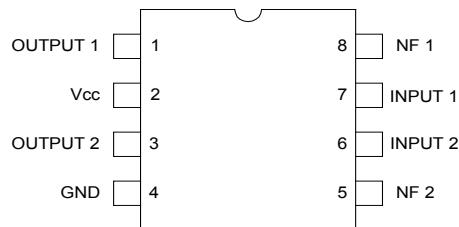
\*Low crossover distortion.

\*Low quiescent circuit current.

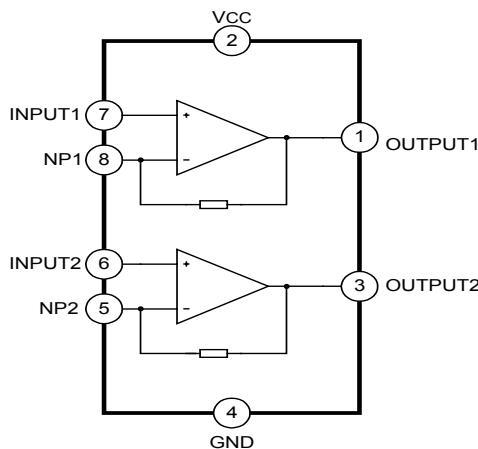
\*Bridge/stereo configuration.



### PIN CONFIGURATIONS



### BLOCK DIAGRAM



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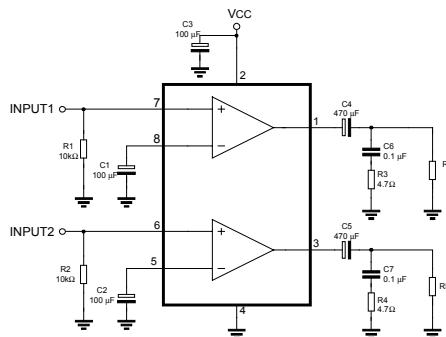
## ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	Vcc	13	V
Output Peak Current	Io(peak)	1	A
Power Dissipation	Pd	DIP at Tamb=50°C 1.0 SOP at Tamb=50°C 0.5	W
Operating Temperature	Topr	-20 ~ +70	°C
Storage Temperature	Tstg	-40 ~ +150	°C

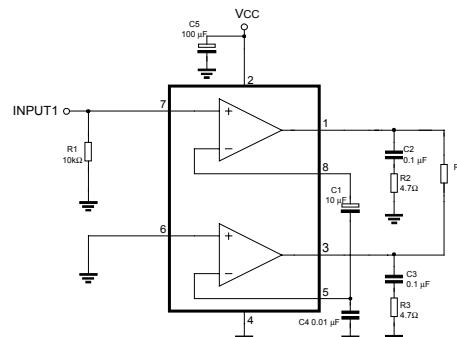
## ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ , $VCC=6\text{V}$ , $f=1\text{kHz}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	Typ	MAX	UNIT
Operating Supply Voltage	Vcc		1.8		12	V
Quiescent Circuit Current	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(DIP) 0.28(SOP)	0.65(DIP) 0.45(SOP)		W
Output Power	PO	Stereo,VCC=3V,RL=4Ω, THD=10%		0.11(DIP) 0.07(SOP)		W
Output Power	PO	Bridge,VCC=6V,RL=4Ω, THD=10%	0.9(DIP) 0.63(SOP)	1.35(DIP) 0.94(SOP)		W
Output Power	PO	Bridge,VCC=6V,RL=4Ω, THD=10%		0.35(DIP) 0.24(SOP)		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			kΩ

TEST CIRCUIT 1:STEREO



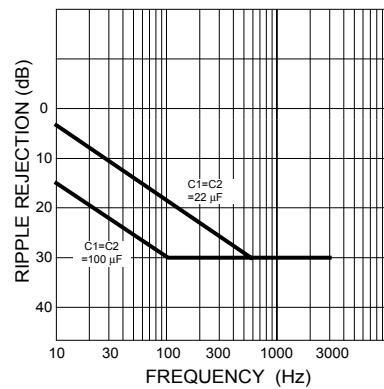
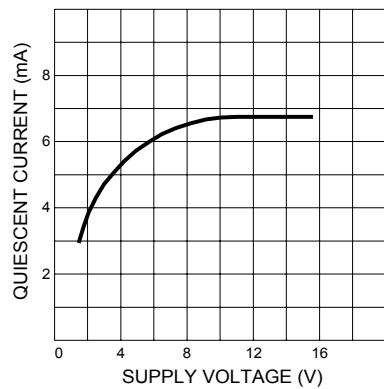
TEST CIRCUIT 2:BRIDGE



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## TYPICAL PERFORMANCE CHARACTERISTICS



## SCHEMATIC DIAGRAM

