

# UTC TDA2822M LINEAR INTEGRATED CIRCUIT

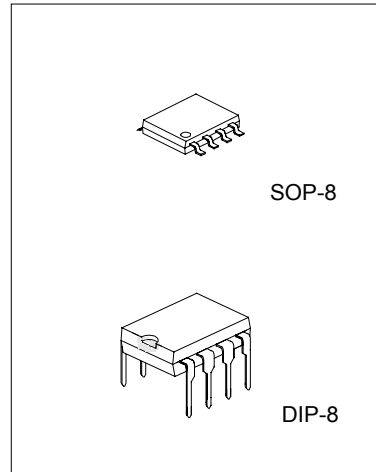
## DUAL LOW VOLTAGE POWER AMPLIFIER

### DESCRIPTION

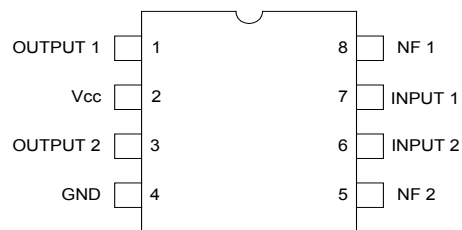
The UTC TDA2822M is a monolithic integrated audio amplifier in a 8-Pin plastic dual in line package. It is designed for portable cassette players and radios.

### FEATURES

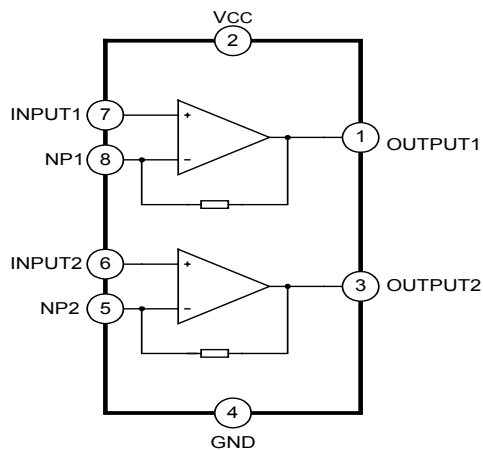
- \*Wide operating supply voltage:  $V_{cc}=1.8V-12V$ .
- \*Low crossover distortion.
- \*Low quiescent circuit current.
- \*Bridge/stereo configuration.



### PIN CONFIGURATIONS



### BLOCK DIAGRAM



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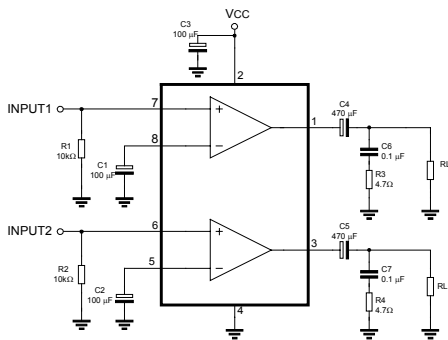
## ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	Vcc	15	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

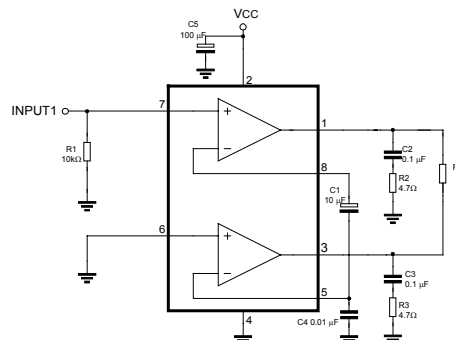
## ELECTRICAL CHARACTERISTICS (Ta=25°C, VCC=6V, f=1kHz, unless otherwise specified)

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

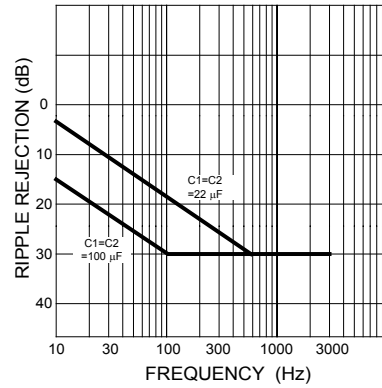
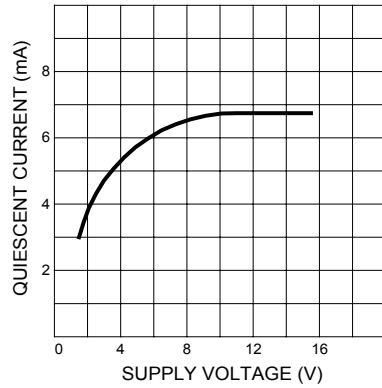


TEST CIRCUIT 2: BRIDGE

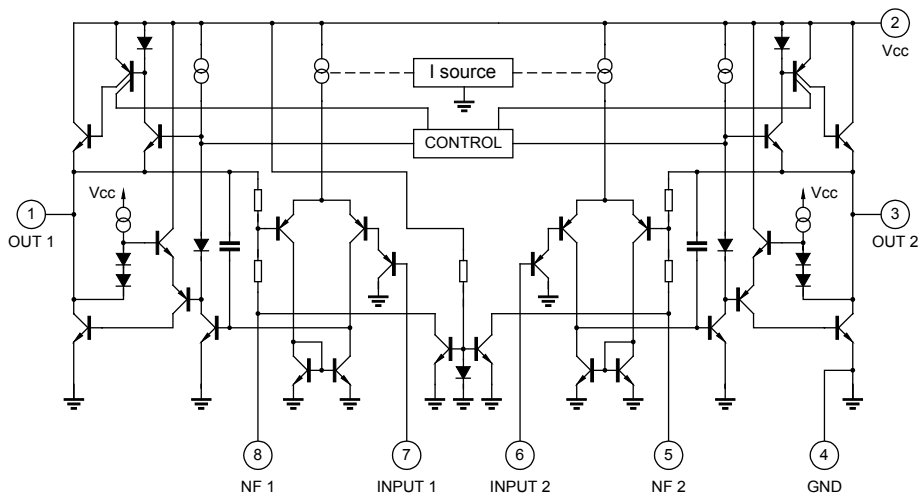


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## TYPICAL PERFORMANCE CHARACTERISTICS



## SCHEMATIC DIAGRAM



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