



TDA2822

LINEAR INTEGRATED CIRCUIT

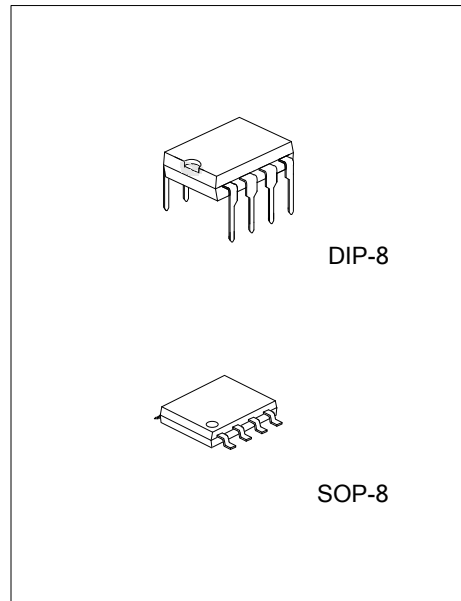
**DUAL LOW VOLTAGE
POWER AMPLIFIER**

■ **DESCRIPTION**

The UTC **TDA2822** 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.



■ **ORDERING INFORMATION**

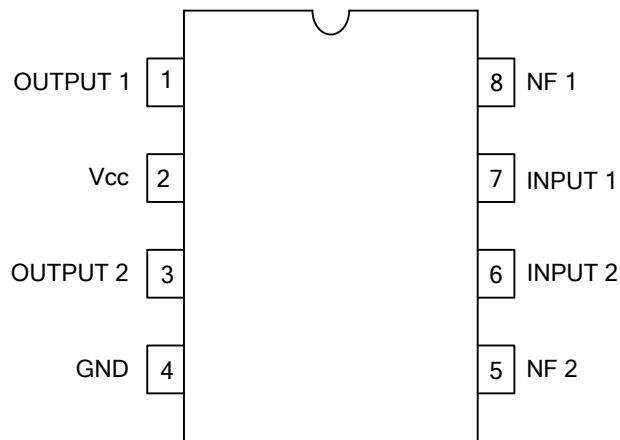
Ordering Number		Package	Packing
Lead Free	Halogen Free		
TDA2822L-D08-T	TDA2822G-D08-T	DIP-8	Tube
TDA2822L-S08-R	TDA2822G-S08-R	SOP-8	Tape Reel

<p>TDA2822G-D08-T</p> <p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) T: Tube, R: Tape Reel (2) D08: DIP-8, S08: SOP-8 (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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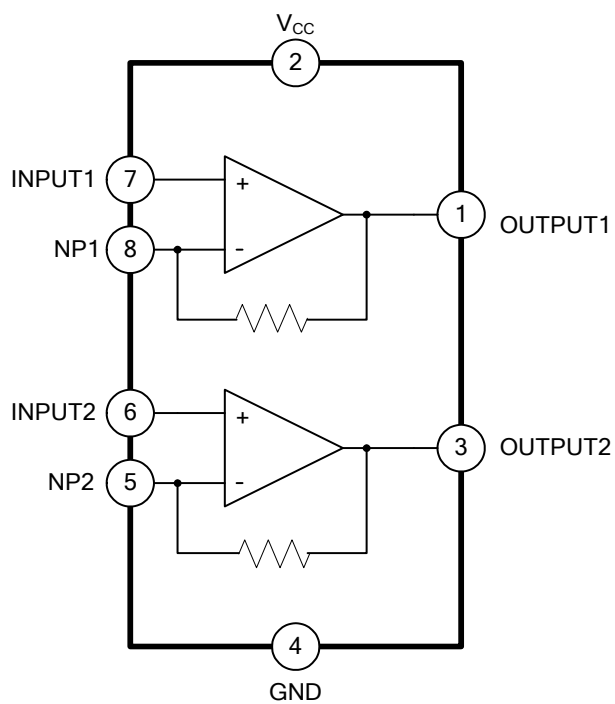
■ **MARKING**

DIP-8	SOP-8
<p>8 7 6 5 UTC □□□□ → Date Code TDA2822 □ → L: Lead Free □ → G: Halogen Free □ □ → Lot Code 1 2 3 4</p>	<p>8 7 6 5 UTC □□□□ → Date Code TDA2822 □ → L: Lead Free □ → G: Halogen Free □ □ → Lot Code 1 2 3 4</p>

■ PIN CONFIGURATIONS



■ BLOCK DIAGRAM



■ **ABSOLUTE MAXIMUM RATINGS** ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V_{CC}	15	V
Output Peak Current	$I_{O(PEAK)}$	1	A
Power Dissipation	DIP-8	1.0	W
	SOP-8	0.5	
Operating Temperature	T_{OPR}	-20~+85	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-40~+150	$^{\circ}\text{C}$

Note:1. Absolute maximum ratings are stress ratings only and functional device operation is not implied. The device could be damaged beyond Absolute maximum ratings.

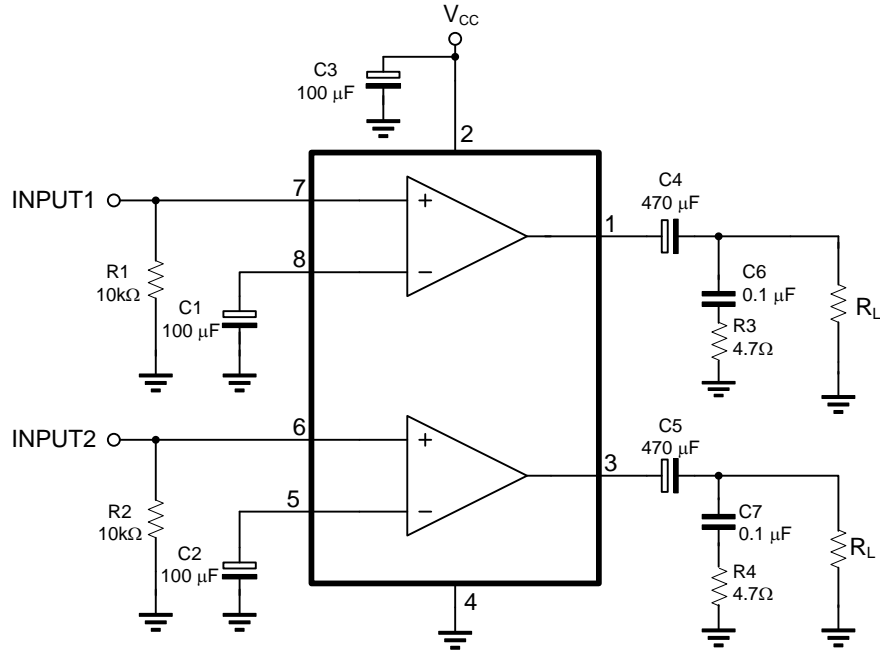
2. The device is guaranteed to meet performance specifications within $0^{\circ}\text{C}\sim 70^{\circ}\text{C}$ operating temperature range and assured by design from $-20^{\circ}\text{C}\sim 85^{\circ}\text{C}$

■ **ELECTRICAL CHARACTERISTICS** ($T_A=25^{\circ}\text{C}$, $V_{CC}=6\text{V}$, $f=1\text{kHz}$, unless otherwise specified)

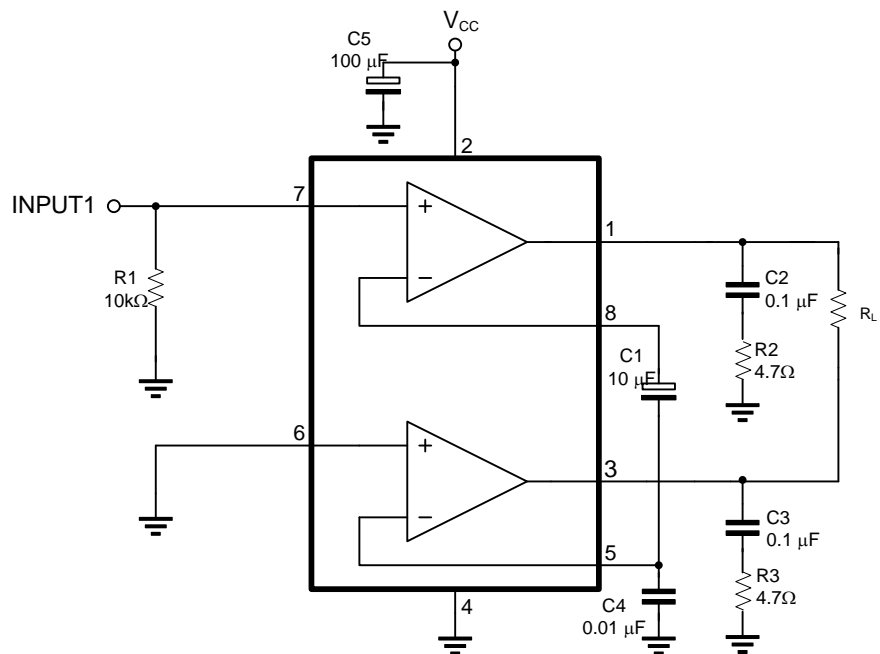
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Operating Supply Voltage	V_{CC}		1.8		12	V
Quiescent Circuit Current	I_{CC}	$V_{IN}=0$		9		mA
Closed Loop Voltage Gain	Stereo Bridge	G_{VC}		40		dB
				40		
Channel Balance	CB	Stereo	-1	0	1	dB
Output Power(Stereo)	DIP-8	P_{OUT}	$V_{CC}=6\text{V}, R_L=4\Omega, THD=10\%$	0.4	0.65	
	SOP-8			0.28	0.45	
	DIP-8	P_{OUT}	$V_{CC}=3\text{V}, R_L=4\Omega, THD=10\%$		0.11	W
	SOP-8				0.07	
Output Power (Bridge)	DIP-8	P_{OUT}	$V_{CC}=6\text{V}, R_L=4\Omega, THD=10\%$	0.9	1.35	W
	SOP-8			0.63	0.94	
	DIP-8	P_{OUT}	$V_{CC}=3\text{V}, R_L=4\Omega, THD=10\%$		0.35	W
	SOP-8				0.24	
Total Harmonic Distortion	Stereo Bridge	THD	$R_L=8\Omega, P_{OUT}=0.2\text{W}$		0.5	%
			$R_L=8\Omega, P_{OUT}=0.5\text{W}$		0.5	%
Ripple Rejection	RR	Stereo, $f=100\text{Hz}, C_3=100\mu\text{F}$	24	30		dB
Output Noise Voltage	eN	Stereo, $BW(-3\text{dB})=20\text{Hz}\sim 20\text{kHz}$		0.5	2.0	mV
Cross Talk	C_T	Stereo, $f=1\text{kHz}$		50		dB
Input Resistance	R_{IN}		100			$\text{k}\Omega$

■ TEST CIRCUIT

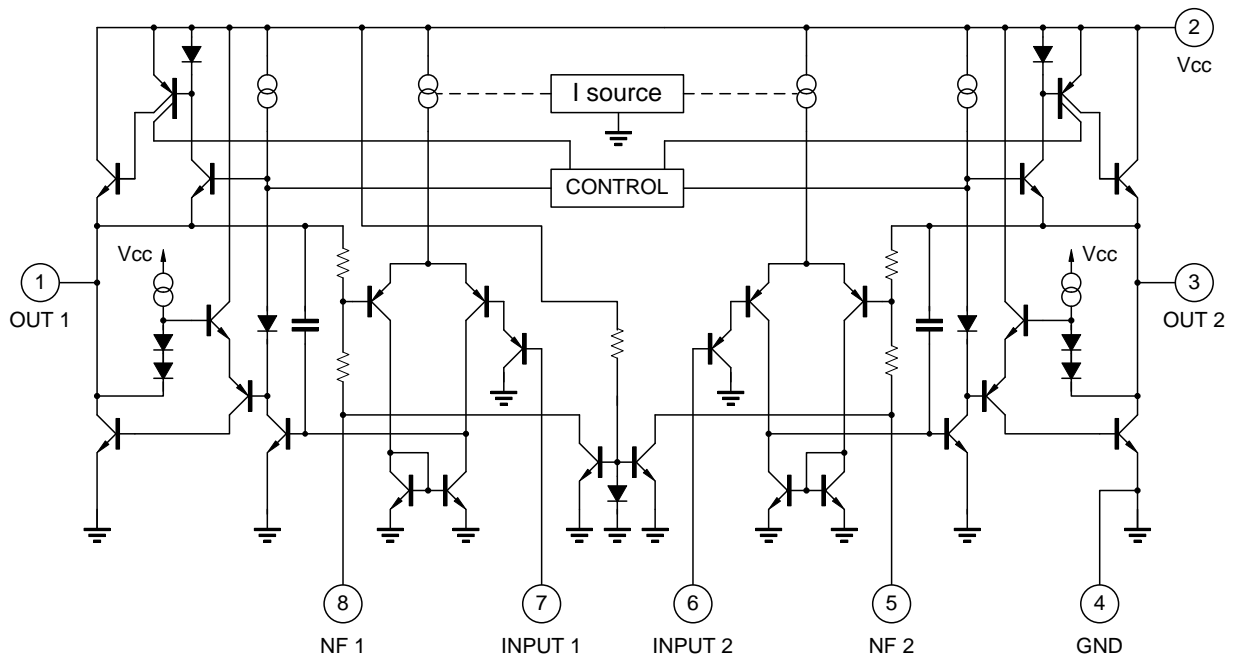
STEREO



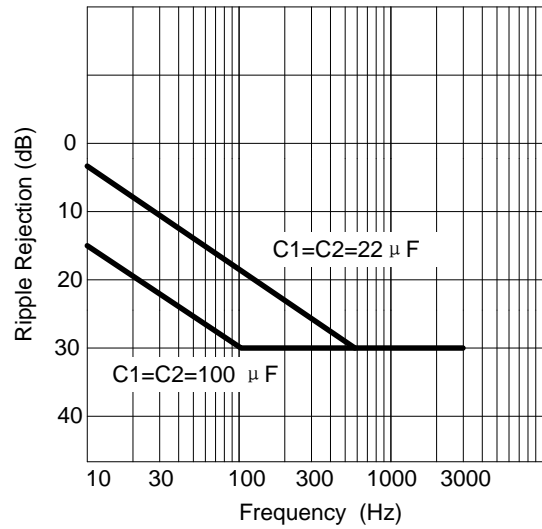
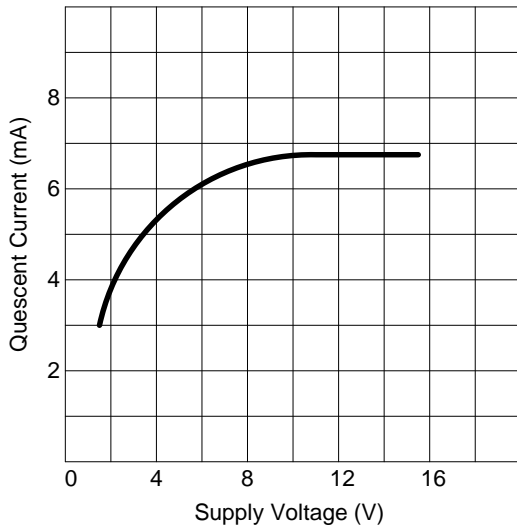
BRIDGE



■ SCHEMATIC DIAGRAM



■ TYPICAL CHARACTERISTICS



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