

EN: This Datasheet is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

# **TDA2822**

### LINEAR INTEGRATED CIRCUIT

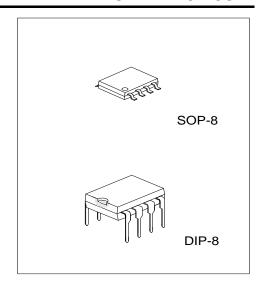
# DUAL LOW VOLTAGE POWER AMPLIFIER

#### **■** 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.

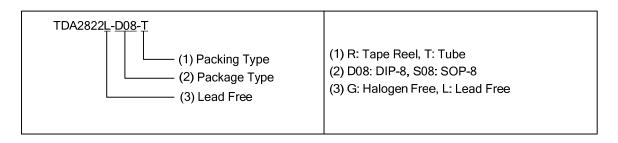
#### **■** FEATURES

- \* Wide Operating Supply Voltage: V<sub>CC</sub>=1.8V 12V.
- \* Low Crossover Distortion.
- \* Low Quiescent Circuit Current.
- \* Bridge/Stereo Configuration.



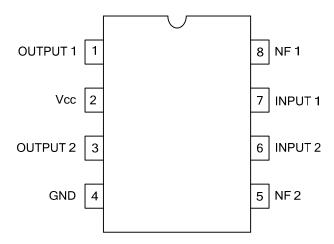
#### ■ ORDERING INFORMATION

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

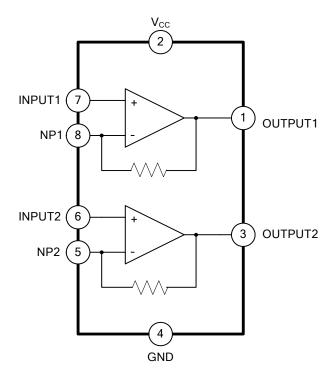


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# **■ PIN CONFIGURATIONS**



### **■** BLOCK DIAGRAM



#### ■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C)

PARAMETER		SYMBOL	RATINGS	UNIT
Supply Voltage		V <sub>cc</sub>	15	V
Output Peak Current		I <sub>O(PEAK)</sub>	1	Α
Power Dissipation	DIP-8	P <sub>D</sub>	1.0	W
	SOP-8		0.5	
Operating Temperature		T <sub>OPR</sub>	-20~+85	°C
Storage Temperature		T <sub>STG</sub>	-40~+150	°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.

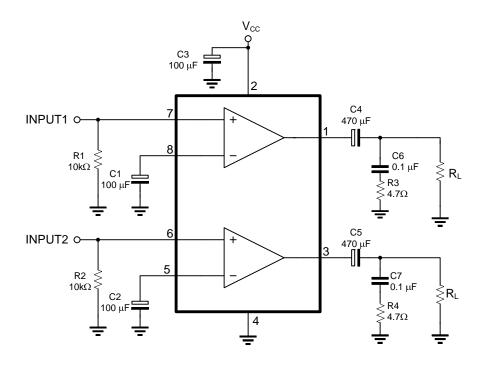
# ■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C, V<sub>CC</sub>=6V, f=1kHz, unless otherwise specified)

PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Operating Supply Voltage		$V_{CC}$		1.8		12	V
Quiescent Circuit Current		Icc	V <sub>IN</sub> =0		9		mA
Closed Loop Voltage Gain	Stereo	G <sub>VC</sub>			40		dB
	Bridge				40		dB
Channel Balance		СВ	Stereo	-1	0	1	dB
Output Power(Stereo)	DIP-8	Роит	$V_{CC}$ =6 $V$ , $R_L$ =4 $\Omega$ , THD=10%	0.4	0.65		W
	SOP-8			0.28	0.45		
	DIP-8		V <sub>CC</sub> =3V,R <sub>L</sub> =4Ω, THD=10%		0.11		W
	SOP-8				0.07		
Output Power (Bridge)	DIP-8	Роит	$V_{CC}$ =6 $V$ , $R_L$ =4 $\Omega$ , THD=10%	0.9	1.35		W
	SOP-8			0.63	0.94		
	DIP-8		$V_{CC}$ =3 $V$ , $R_L$ =4 $\Omega$ , THD=10%		0.35		W
	SOP-8				0.24		
Total Harmonic Distortion	Stereo	THD	$R_L=8\Omega$ , $P_{OUT}=0.2W$		0.5		%
	Bridge		$R_L=8\Omega$ , $P_{OUT}=0.5W$		0.5		%
Ripple Rejection		RR	Stereo, f=100Hz,C3=100μF	24	30		dB
Output Noise Voltage		eN	Stereo, BW(-3dB)=20Hz ~20kHz		0.5	2.0	mV
Cross Talk		Ст	Stereo, f=1kHz		50		dB
Input Resistance		R <sub>IN</sub>		100			kΩ

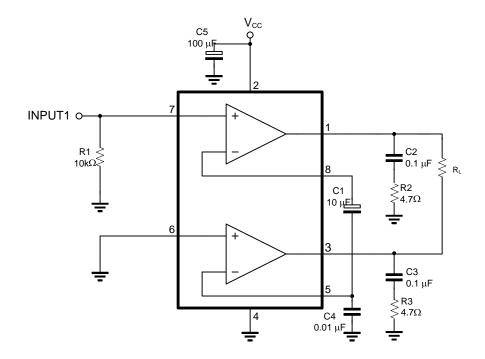
<sup>2.</sup> The device is guaranteed to meet performance specifications within  $0^{\circ}\text{C} \sim 70^{\circ}\text{C}$  operating temperature range and assured by design from  $-20^{\circ}\text{C} \sim 85^{\circ}\text{C}$ 

#### ■ TEST CIRCUIT

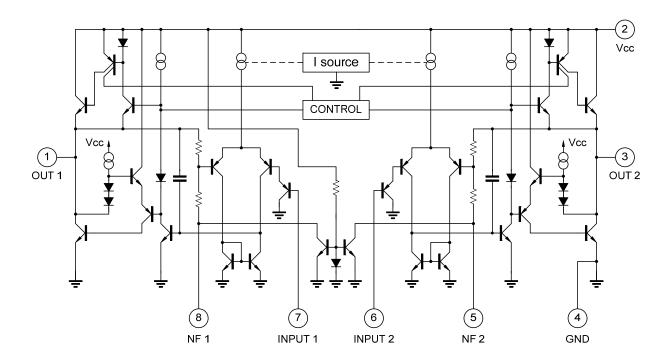
#### **STEREO**



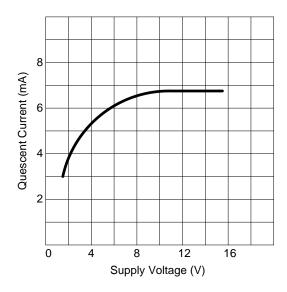
#### BRIDGE

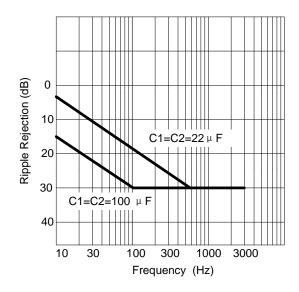


# ■ SCHEMATIC DIAGRAM



#### **■ TYPICAL CHARACTERISTICS**





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