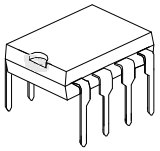
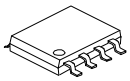
TDA2822H

LINEAR INTEGRATED CIRCUIT

DUAL LOW VOLTAGE POWER AMPLIFIER



DIP-8



SOP-8

■ DESCRIPTION

The UTC **TDA2822H** 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~ 6V.
*Low crossover distortion.
*Low quiescent circuit current.
*Bridge/stereo configuration.

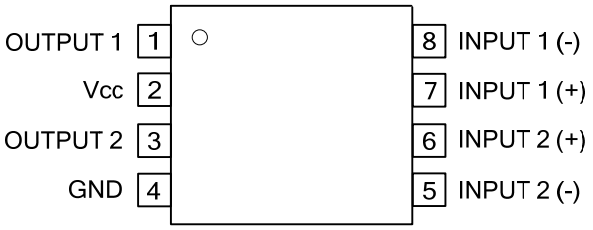
■ ORDERING INFORMATION

Order Number		Package	Packing
Lead Free	Halogen Free		
TDA2822HL-D08-T	TDA2822HG-D08-T	DIP-8	Tube
TDA2822HL-S08-T	TDA2822HG-S08-T	SOP-8	Tube
TDA2822HL-S08-R	TDA2822HG-S08-R	SOP-8	Tape Reel

TDA2822HL-D08-T
(1)Packing Type
(2)Package Type
(3)Lead Free

(1) T: Tube, R: Tape Reel
(2) D08: DIP-8, S08: SOP-8
(3) L: Lead Free, G: Halogen Free

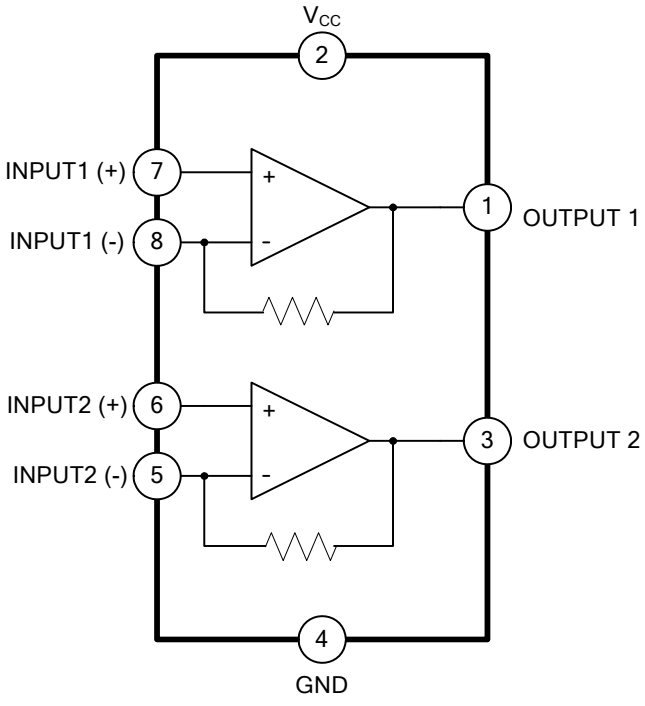
■ PIN CONFIGURATION



■ PIN DESCRIPTION

PIN NO	PIN NAME	DESCRIPTION
1	OUTPUT 1	Output of Channel 1
2	V_{CC}	Supply Voltage
3	OUTPUT 2	Output of Channel 2
4	GND	Ground.
5	INPUT 2(-)	Inverting Input of Channel 2
6	INPUT 2(+)	Non-Inverting Input of Channel 2
7	INPUT 1 (+)	Non-Inverting Input of Channel 1
8	INPUT 1 (-)	Inverting Input of Channel 1

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

PARAMETER			SYMBOL	RATINGS	UNIT
Supply Voltage			V_{CC}	15	V
Output Peak Current			$I_{O(peak)}$	1	A
Power Dissipation	T_A=50°C	DIP-8	P_D	1.0	W
	T_C=50°C			1.4	W
	T_A=50°C	SOP-8		0.5	W
Operating Temperature			T_{OPR}	-20~+85	°C
Storage Temperature			T_{STG}	-40 ~ +150	°C

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, V_{CC}=4.5V, BTL parameter, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS			MIN	TYP	MAX	UNIT
Operating Supply Voltage	V_{CC}				1.8		6	V
Quiescent Circuit Current	I_{CCQ}	R_L=∝				9		mA
Output Offset Voltage	V_{OS}	R_L=8Ω					±50	mV
Input Base Current	I_B					100		nA
Output Power	P_O	f=1kHz, THD=10%	R_L=32Ω	V_{CC}=6V	300	320		mW
				V_{CC}=4.5V		200		
				V_{CC}=3V	50	65		
				V_{CC}=2V		8		
			R_L=16Ω	V_{CC}=6V		600		
				V_{CC}=3V		120		
			R_L=8Ω	V_{CC}=4.5V		700		
				V_{CC}=3V		220		
			R_L=4Ω	V_{CC}=3V	200	350		
Total Harmonic Distortion	THD	Po=0.5W, RL=8Ω, Po=1kHz				0.2		%
Closed Loop Voltage Gain	A_{VF}	f=1kHz				39		dB
Input Resistance	Z_{IN}	f=1kHz			100			kΩ
Total Input Noise	e_N	Rs=10kΩ	B=22Hz ~ 22KHz			3		μV
Supply Voltage Rejection	SVR	f=100Hz				40		dB
Power Bandwidth	BWp	R_L=8Ω, Po=1W				120		kHz

■ APPLICATION CIRCUIT

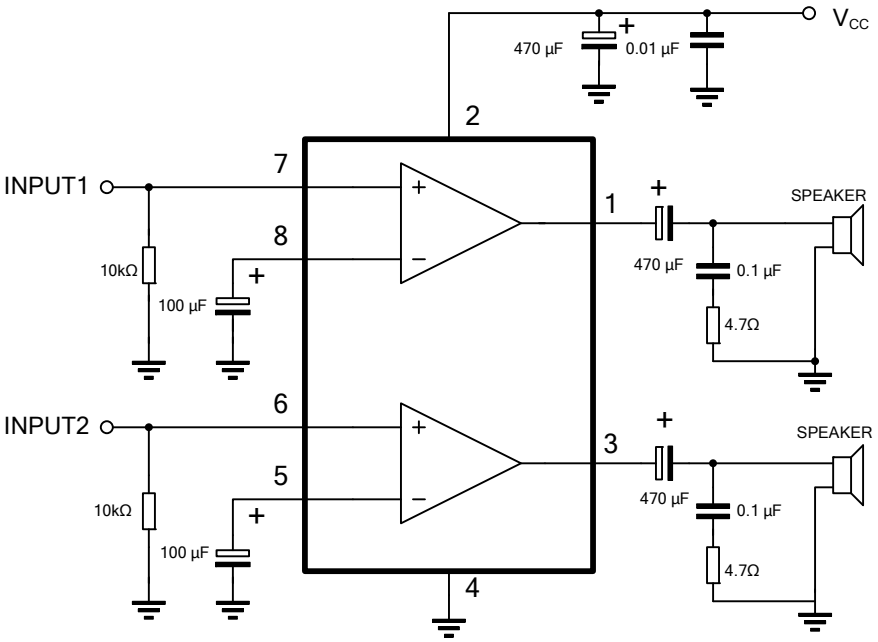


Fig 1. STEREO

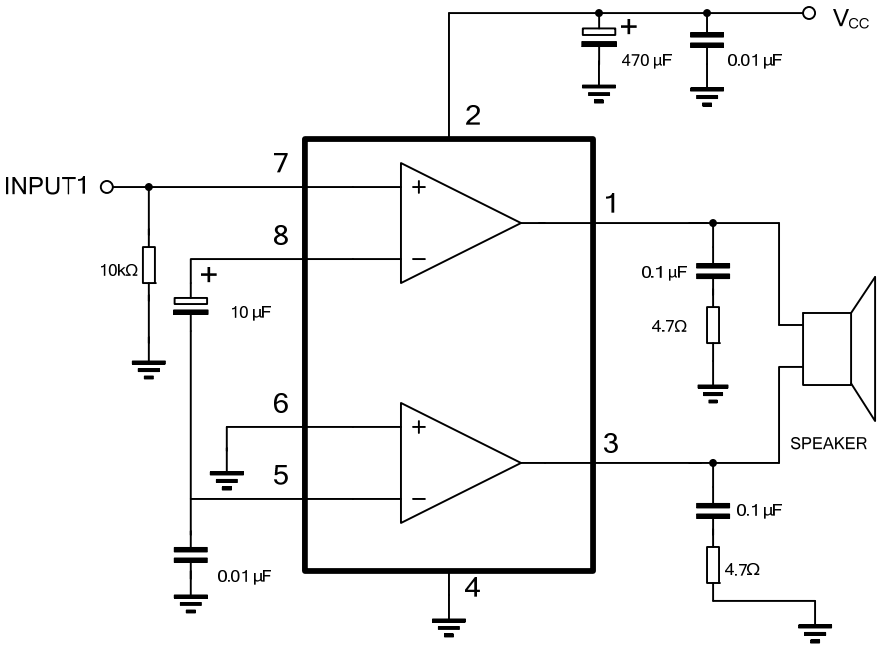


Fig 2. BRIDGE