



TDA2822H

LINEAR INTEGRATED CIRCUIT

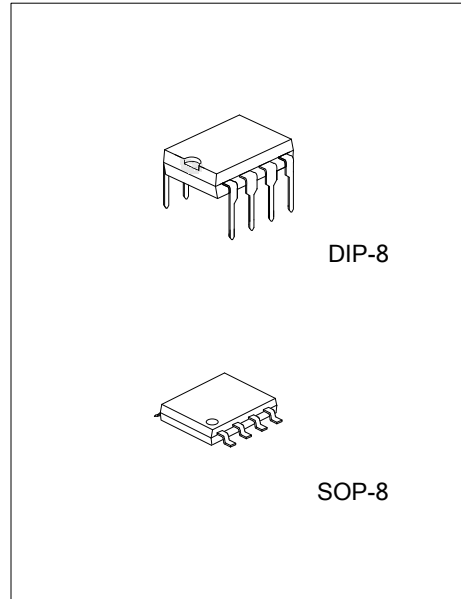
DUAL LOW VOLTAGE POWER AMPLIFIER

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: $V_{CC}=1.8V\sim 6V$.
- *Low crossover distortion.
- *Low quiescent circuit current.
- *Bridge/stereo configuration.



ORDERING INFORMATION

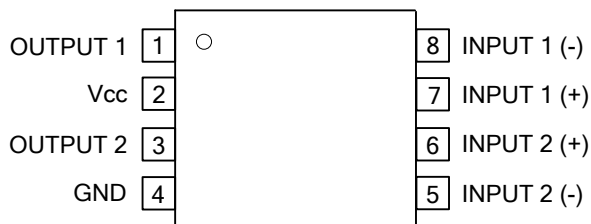
Ordering Number		Package	Packing
Lead Free	Halogen Free		
TDA2822HL-D08-T	TDA2822HG-D08-T	DIP-8	Tube
TDA2822HL-S08-R	TDA2822HG-S08-R	SOP-8	Tape Reel

<p>TDA2822HG-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 → Date Code UTC □□□□ TDA2822H □ □ □ → Lot Code L: Lead Free G: Halogen Free</p>	<p>8 7 6 5 → Date Code UTC □□□□ TDA2822H □ ● □ □ → Lot Code L: Lead Free G: Halogen Free</p>

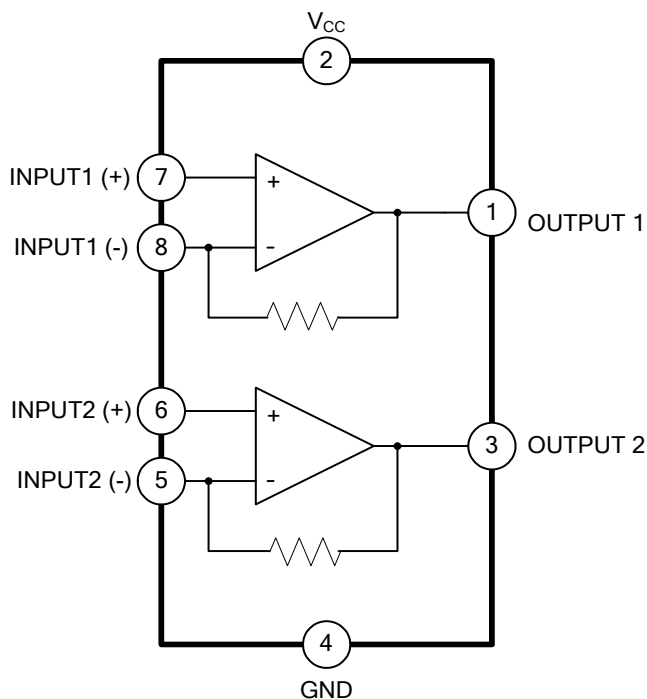
■ PIN CONFIGURATION



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

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

■ ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$, $V_{CC}=4.5\text{V}$, 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}	$R_L=\infty$		9		mA			
Output Offset Voltage	V_{OS}	$R_L=8\Omega$			± 50	mV			
Input Base Current	I_B			100		nA			
Output Power	P_O	$f=1\text{kHz}$, THD=10%	$R_L=32\Omega$	$V_{CC}=6\text{V}$	300	320	mW		
				$V_{CC}=4.5\text{V}$		200			
				$V_{CC}=3\text{V}$	50	65			
				$V_{CC}=2\text{V}$		8			
			$R_L=16\Omega$	$V_{CC}=6\text{V}$		600			
				$V_{CC}=3\text{V}$		120			
				$R_L=8\Omega$	$V_{CC}=4.5\text{V}$			700	
					$V_{CC}=3\text{V}$			220	
$R_L=4\Omega$	$V_{CC}=3\text{V}$	200	350						
Total Harmonic Distortion	THD	$P_O=0.5\text{W}$, $R_L=8\Omega$, $P_O=1\text{kHz}$		0.2		%			
Closed Loop Voltage Gain	A_{VF}	$f=1\text{kHz}$		39		dB			
Input Resistance	Z_{IN}	$f=1\text{kHz}$	100			k Ω			
Total Input Noise	e_N	$R_S=10\text{k}\Omega$ $B=22\text{Hz} \sim 22\text{KHz}$		3		μV			
Supply Voltage Rejection	SVR	$f=100\text{Hz}$		40		dB			
Power Bandwidth	BWp	$R_L=8\Omega$, $P_O=1\text{W}$		120		kHz			

APPLICATION CIRCUIT

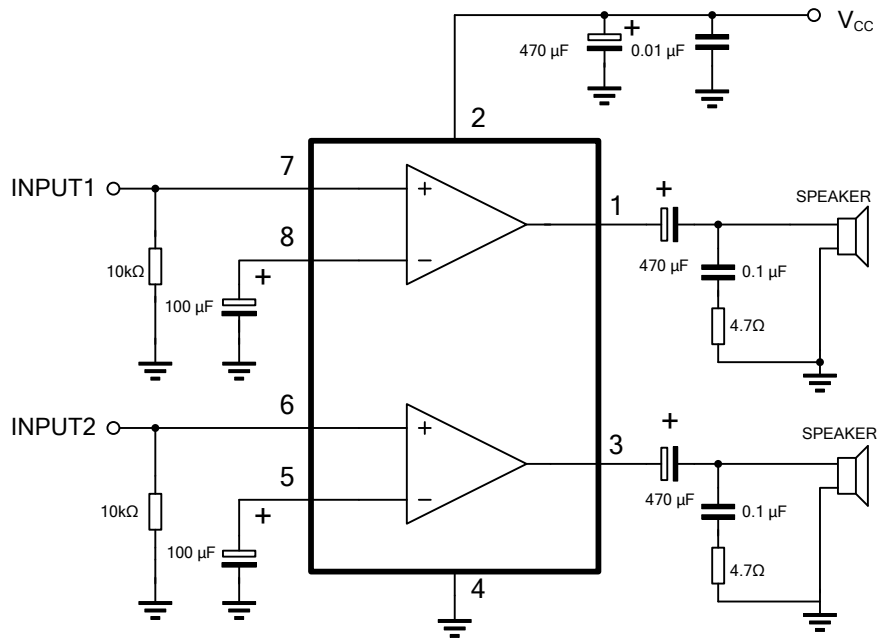


Fig 1. STEREO

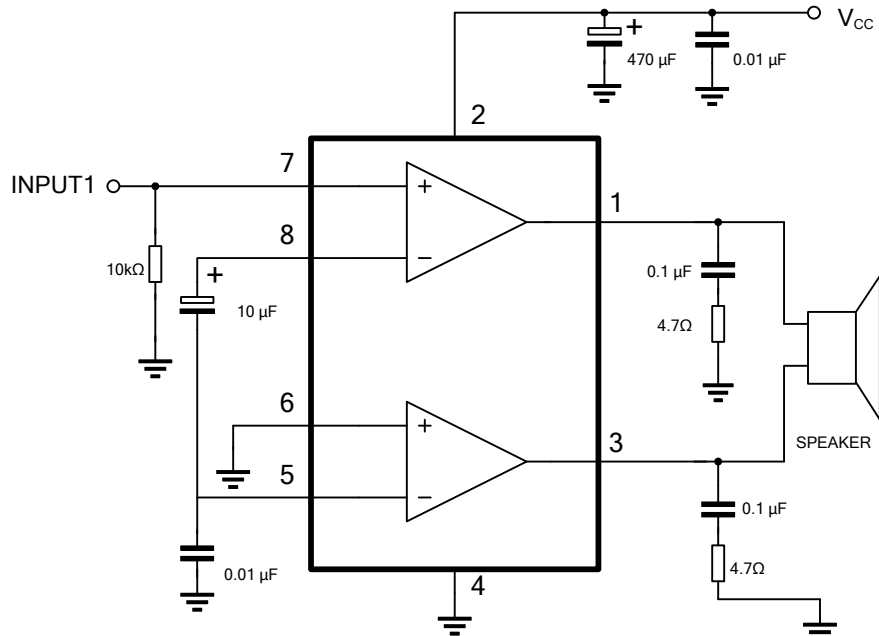


Fig 2. BRIDGE

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