

# UTC TDA2822H LINEAR INTEGRATED CIRCUIT

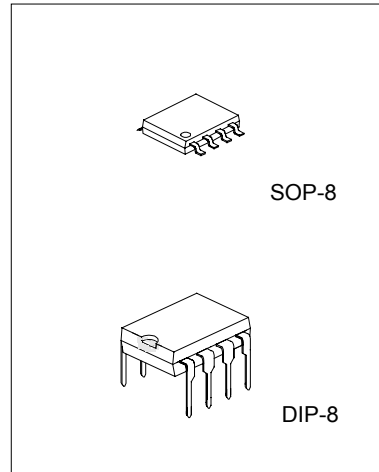
## DUAL LOW VOLTAGE POWER AMPLIFIER

### DESCRIPTION

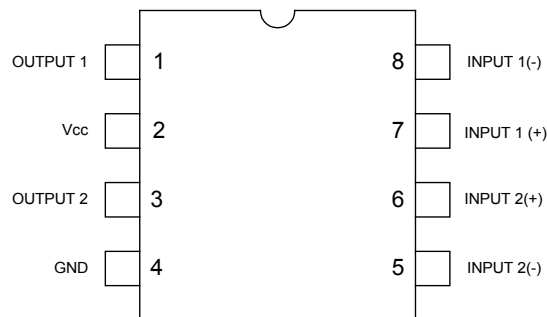
The UTC TDA2822H is a monolithic integrated audio amplifier in a 8-Pin plastic dual in line package. It is designed for portable cassette players and radios.

### FEATURES

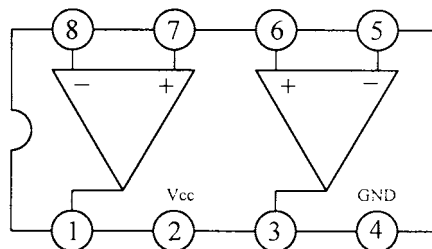
- \*Wide operating supply voltage:  $V_{cc}=1.8V\sim 6V$ .
- \*Low crossover distortion.
- \*Low quiescent circuit current.
- \*Bridge/stereo configuration.



### PIN CONFIGURATIONS



### BLOCK DIAGRAM



# UTC TDA2822H LINEAR INTEGRATED CIRCUIT

## ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

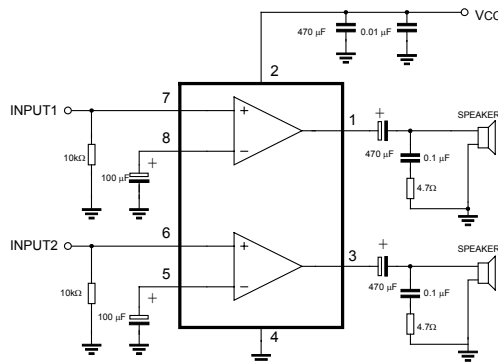
PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	V <sub>CC</sub>	15	V
Output Peak Current	I <sub>o</sub> (peak)	1	A
Power Dissipation	P <sub>D</sub>	1.0 (T <sub>AMB</sub> =50°C)	W
		1.4 (T <sub>CASE</sub> =50°C)	
		0.5 (T <sub>AMB</sub> =50°C)	
Operating Temperature	T <sub>J</sub>	+150	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +150	°C

## ELECTRICAL CHARACTERISTICS (Ta=25°C, V<sub>CC</sub>=4.5V, BTL parameter, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT			
Operating Supply Voltage	V <sub>CC</sub>		1.8		6	V			
Quiescent Circuit Current	I <sub>CCQ</sub>	R <sub>L</sub> =∞		6	9	mA			
Output Offset Voltage	V <sub>OS</sub>	R <sub>L</sub> =8Ω			±50	mV			
Input Base Current	I <sub>B</sub>			100		nA			
Output Power	P <sub>O</sub>	f=1kHz, THD=10%	R <sub>L</sub> =32Ω	V <sub>CC</sub> =6V	300	320	mW		
				V <sub>CC</sub> =4.5V		200			
				V <sub>CC</sub> =3V	50	65			
				V <sub>CC</sub> =2V		8			
				R <sub>L</sub> =16Ω	V <sub>CC</sub> =6V			600	
				V <sub>CC</sub> =3V		120			
			R <sub>L</sub> =8Ω	V <sub>CC</sub> =4.5V		700			
				V <sub>CC</sub> =3V		220			
				R <sub>L</sub> =4Ω	V <sub>CC</sub> =3V	200		350	
Total Harmonic Distortion	THD	P <sub>O</sub> =0.5W, R <sub>L</sub> =8Ω, P <sub>O</sub> =1kHz		0.2		%			
Closed Loop Voltage Gain	A <sub>VF</sub>	f=1kHz		39		dB			
Input Resistance	Z <sub>in</sub>	f=1kHz	100			kΩ			
Total Input Noise	e <sub>N</sub>	R <sub>S</sub> =10kΩ   B=22Hz~22KHz		3		μV			
Supply Voltage Rejection	SVR	f=100Hz		40		dB			
Power Bandwidth	BW <sub>p</sub>	R <sub>L</sub> =8Ω, P <sub>O</sub> =1W		120		kHz			

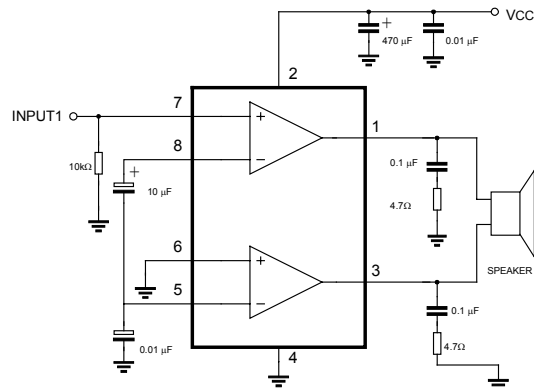
## APPLICATION CIRCUIT

Fig. 1: STEREO



# UTC TDA2822H LINEAR INTEGRATED CIRCUIT

Fig. 2: BRIDGE



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.