

UTC TDA2822H LINEAR INTEGRATED CIRCUIT

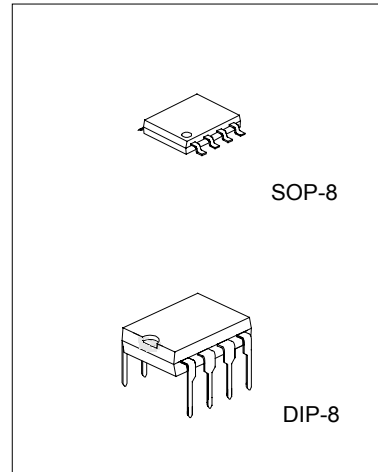
DUAL LOW VOLTAGE POWER AMPLIFIER

DESCRIPTION

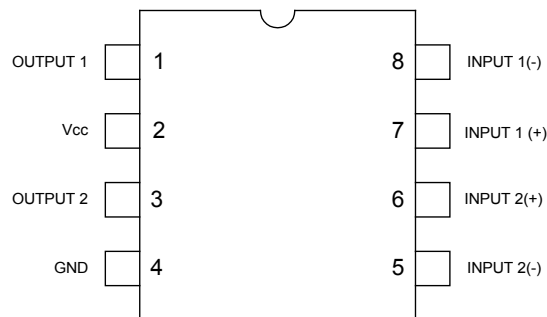
The UTC TDA2822H is a monolithic integrated audio amplifier in a 8-Pin plastic dual in line package. It is designed for portable cassette players and radios.

FEATURES

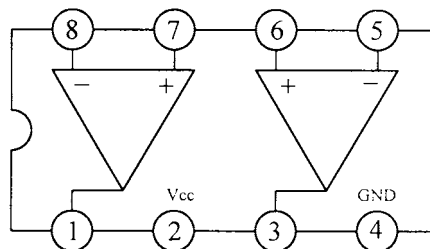
- *Wide operating supply voltage: $V_{cc}=1.8V\sim 6V$.
- *Low crossover distortion.
- *Low quiescent circuit current.
- *Bridge/stereo configuration.



PIN CONFIGURATIONS



BLOCK DIAGRAM



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ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

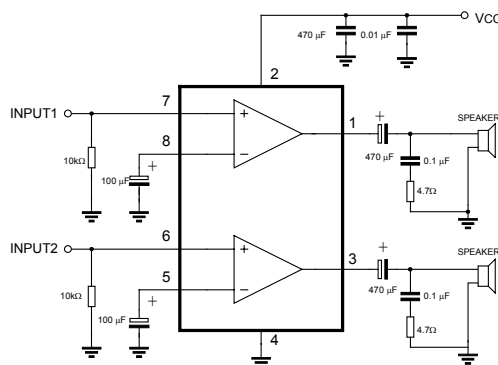
PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	V _{CC}	15	V
Output Peak Current	I _o (peak)	1	A
Power Dissipation	P _D	1.0 (T _{AMB} =50°C)	W
		1.4 (T _{CASE} =50°C)	
		0.5 (T _{AMB} =50°C)	
Operating Temperature	T _J	+150	°C
Storage Temperature	T _{stg}	-40 ~ +150	°C

ELECTRICAL CHARACTERISTICS (Ta=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 =∞		6	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		
				V _{CC} =4.5V		700		
			R _L =8Ω	V _{CC} =3V		220		
				V _{CC} =3V	200	350		
			Total Harmonic Distortion	THD	P _O =0.5W, R _L =8Ω, P _O =1kHz			0.2
Closed Loop Voltage Gain	AV _F	f=1kHz		39		dB		
Input Resistance	Z _{in}	f=1kHz	100			kΩ		
Total Input Noise	e _N	R _S =10kΩ B=22Hz~22KHz		3		μV		
Supply Voltage Rejection	SVR	f=100Hz		40		dB		
Power Bandwidth	BW _p	R _L =8Ω, P _O =1W		120		kHz		

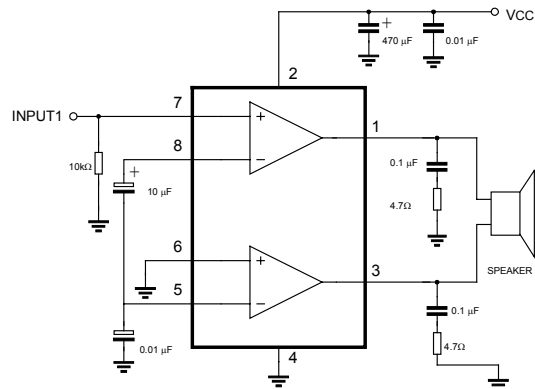
APPLICATION CIRCUIT

Fig. 1: STEREO



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Fig. 2: BRIDGE



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