UTC UNISONIC TECHNOLOGIES CO.,LTD.

TDA2822

LINEAR INTEGRATED CIRCUIT

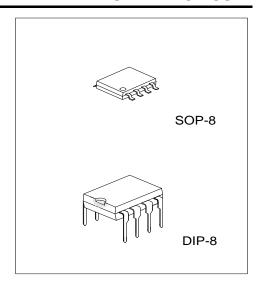
DUAL LOW VOLTAGE POWER AMPLIFIER

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.

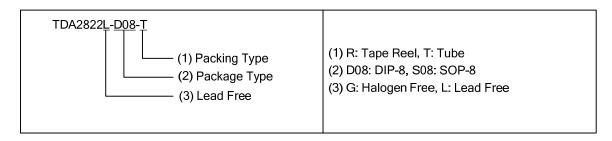
FEATURES

- * Wide Operating Supply Voltage: V_{CC}=1.8V 12V.
- * Low Crossover Distortion.
- * Low Quiescent Circuit Current.
- * Bridge/Stereo Configuration.



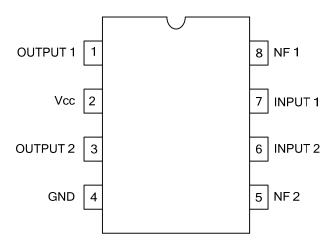
ORDERING INFORMATION

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	

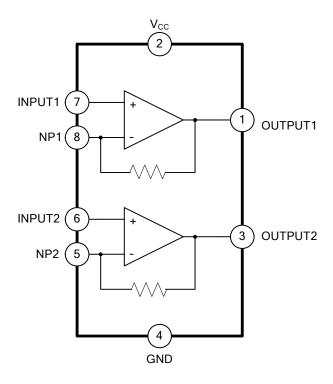


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■ PIN CONFIGURATIONS



■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

PARAMETER		SYMBOL	RATINGS	UNIT	
Supply Voltage		V _{CC}	15	V	
Output Peak Current		I _{O(PEAK)}	1	Α	
Power Dissipation	DIP-8	Ь	1.0	W	
	SOP-8	P_{D}	0.5		
Operating Temperature		T _{OPR}	-20~+85	°C	
Storage Temperature		T _{STG}	-40~+150	°C	

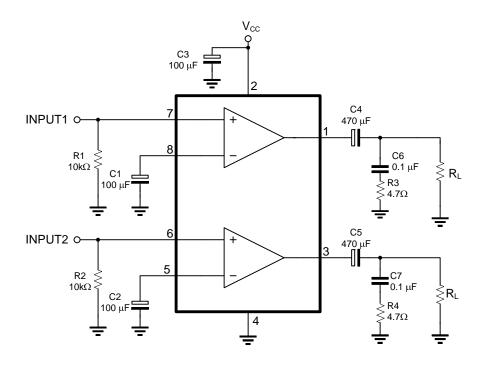
- Note:1. Absolute maximum ratings are stress ratings only and functional device operation is not implied. The device could be damaged beyond Absolute maximum ratings.
 - 2. The device is guaranteed to meet performance specifications within $0^{\circ}\text{C} \sim 70^{\circ}\text{C}$ operating temperature range and assured by design from $-20^{\circ}\text{C} \sim 85^{\circ}\text{C}$

■ **ELECTRICAL CHARACTERISTICS** (T_A=25°C, V_{CC}=6V, f=1kHz, unless otherwise specified)

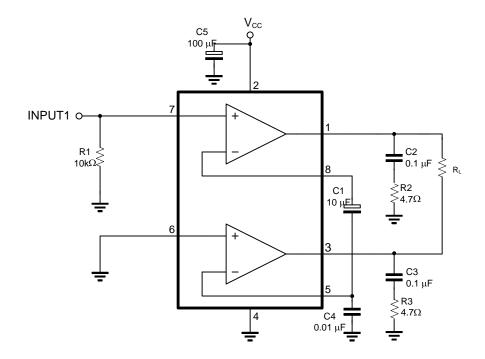
PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Operating Supply Voltage		V_{CC}		1.8		12	V
Quiescent Circuit Current		Icc	V _{IN} =0		9		mA
Closed Loop Voltage Gain	Stereo	G _{VC}			40		dB
	Bridge				40		dB
Channel Balance		СВ	Stereo	-1	0	1	dB
Output Power(Stereo)	DIP-8	P _{OUT}	V_{CC} =6 V , R_L =4 Ω , THD=10%	0.4	0.65		W
	SOP-8			0.28	0.45		
	DIP-8		V_{CC} =3 V , R_L =4 Ω , THD=10%		0.11		W
	SOP-8				0.07		
Output Power (Bridge)	DIP-8	Роит	V_{CC} =6 V , R_L =4 Ω , THD=10%	0.9	1.35		W
	SOP-8			0.63	0.94		
	DIP-8		V_{CC} =3 V , R_L =4 Ω , 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		C _T	Stereo, f=1kHz		50		dB
Input Resistance		R _{IN}		100			kΩ

■ TEST CIRCUIT

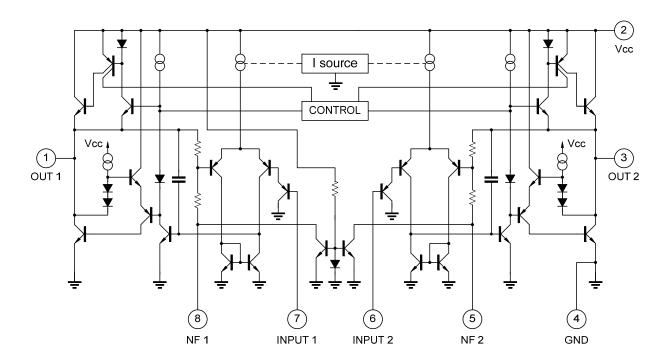
STEREO



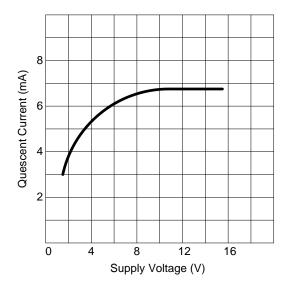
BRIDGE

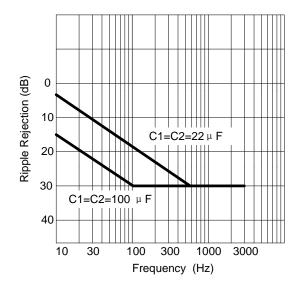


■ SCHEMATIC DIAGRAM



■ TYPICAL CHARACTERISTICS





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