



UNISONIC TECHNOLOGIES CO.,LTD.

TDA2822

LINEAR INTEGRATED CIRCUIT

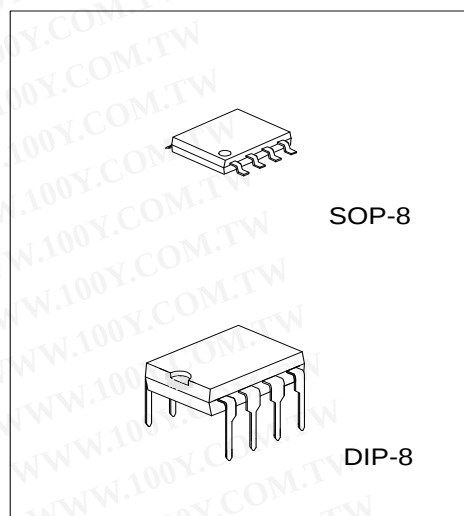
DUAL LOW VOLTAGE POWER AMPLIFIER

■ 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.



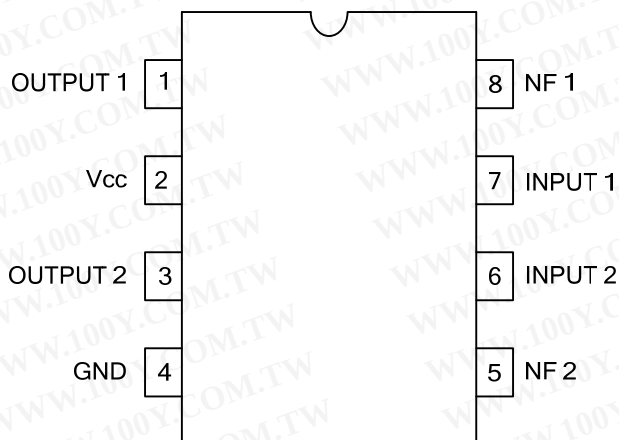
■ ORDERING INFORMATION

Ordering Number		Package	Packing
Lead Free	Halogen Free		
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

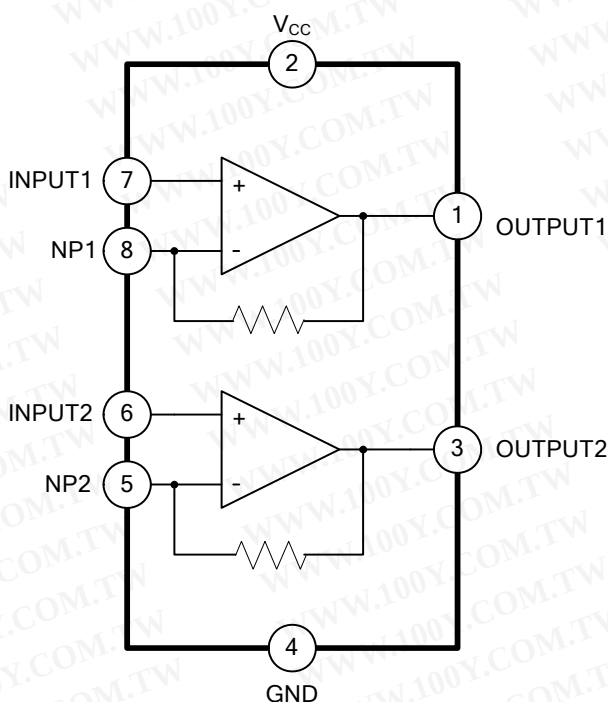
TDA2822L-D08-T (1) Packing Type (2) Package Type (3) Lead Free	(1) R: Tape Reel, T: Tube (2) D08: DIP-8, S08: SOP-8 (3) G: Halogen Free, L: Lead Free
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勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

■ PIN CONFIGURATIONS



■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

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

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.

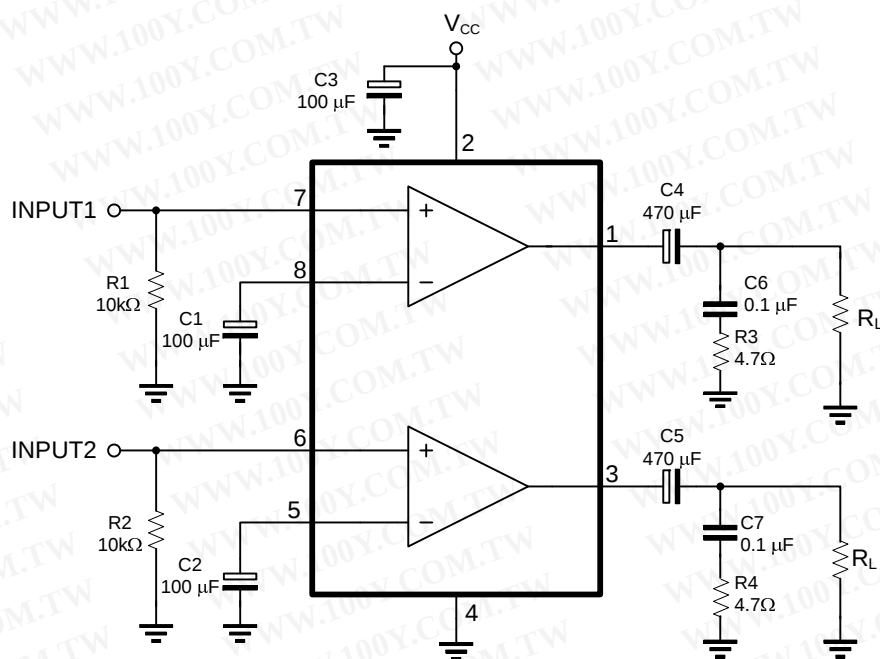
2. The device is guaranteed to meet performance specifications within $0^{\circ}\text{C}\sim 70^{\circ}\text{C}$ operating temperature range and assured by design from $-20^{\circ}\text{C}\sim 85^{\circ}\text{C}$

■ ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$, $V_{CC}=6\text{V}$, $f=1\text{kHz}$, unless otherwise specified)

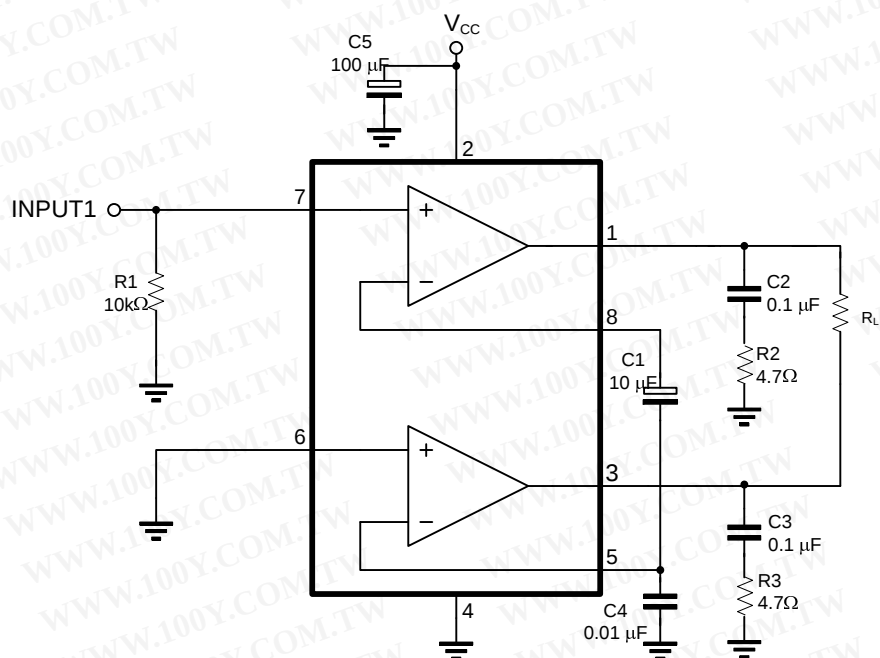
PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Operating Supply Voltage		V_{CC}		1.8		12	V
Quiescent Circuit Current		I_{CC}	$V_{IN}=0$		9		mA
Closed Loop Voltage Gain	Stereo	G_{VC}			40		dB
	Bridge				40		dB
Channel Balance		CB	Stereo	-1	0	1	dB
Output Power(Stereo)	DIP-8	P_{OUT}	$V_{CC}=6\text{V}, R_L=4\Omega, \text{THD}=10\%$	0.4	0.65		W
	SOP-8			0.28	0.45		
	DIP-8		$V_{CC}=3\text{V}, R_L=4\Omega, \text{THD}=10\%$		0.11		W
	SOP-8				0.07		
Output Power (Bridge)	DIP-8	P_{OUT}	$V_{CC}=6\text{V}, R_L=4\Omega, \text{THD}=10\%$	0.9	1.35		W
	SOP-8			0.63	0.94		
	DIP-8		$V_{CC}=3\text{V}, R_L=4\Omega, \text{THD}=10\%$		0.35		W
	SOP-8				0.24		
Total Harmonic Distortion	Stereo	THD	$R_L=8\Omega, P_{OUT}=0.2\text{W}$		0.5		%
	Bridge		$R_L=8\Omega, P_{OUT}=0.5\text{W}$		0.5		%
Ripple Rejection		RR	Stereo, $f=100\text{Hz}, C_3=100\mu\text{F}$	24	30		dB
Output Noise Voltage		eN	Stereo, $\text{BW}(-3\text{dB})=20\text{Hz}\sim 20\text{kHz}$		0.5	2.0	mV
Cross Talk		C_T	Stereo, $f=1\text{kHz}$		50		dB
Input Resistance		R_{IN}		100			$\text{k}\Omega$

■ TEST CIRCUIT

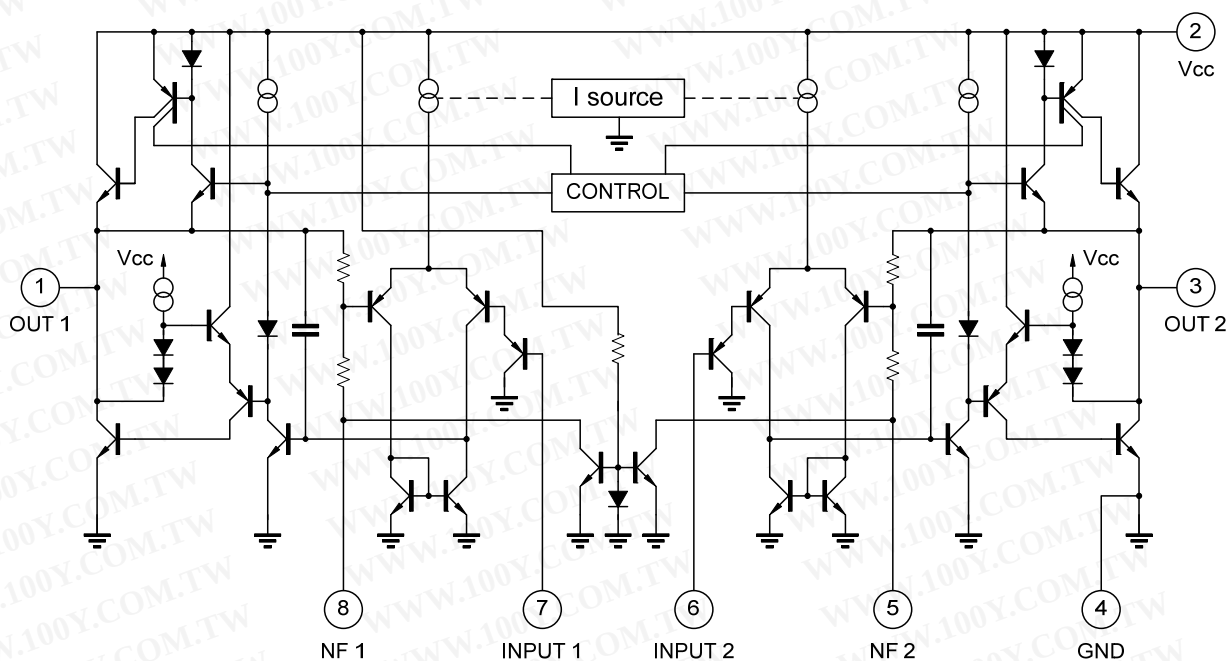
STEREO



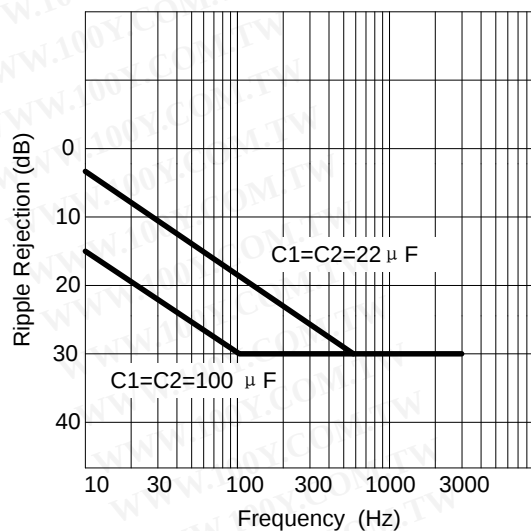
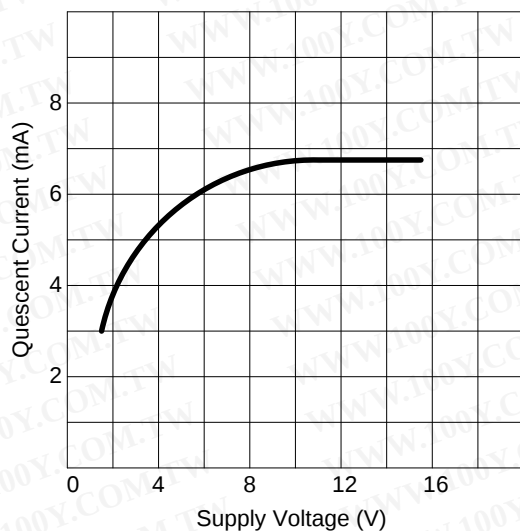
BRIDGE



■ SCHEMATIC DIAGRAM



■ TYPICAL CHARACTERISTICS



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