

UTC TA8227P LINEAR INTEGRATED CIRCUIT

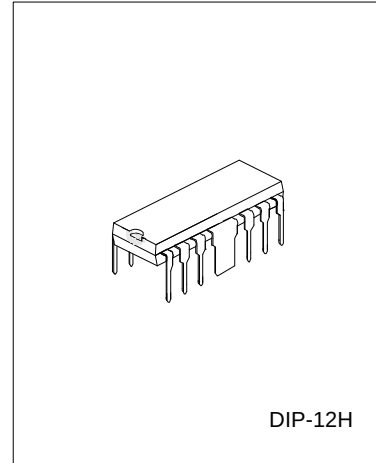
2.5W DUAL AUDIO POWER AMPLIFIER

DESCRIPTION

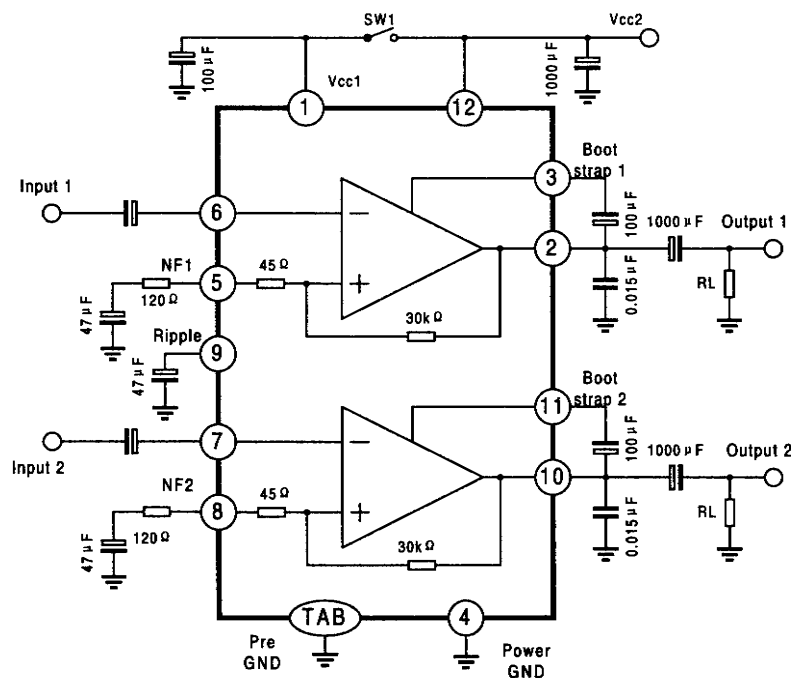
The UTC TA8227P is a dual channel audio power amplifier with built-in ON/OFF switch for general application.

FEATURES

- *Wide operating supply voltage: $V_{CC}=5\sim 12V$
- *Low quiescent supply current
- *Output power $P_o=2.50W/CH$ at $V_{CC}=9V$, $R_L=4\Omega$, $f=1kHz$, $THD=10\%$
- *Soft Clip
- *Built-in Thermal shut-down protection circuit
- *Stand-by Switch



TEST CIRCUIT



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ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	Vcc	20	V
Output Current	Io	2.5	A
Power Dissipation (note)	Pd	4	W
Operating Temperature	Topr	-25~75	°C
Storage Temperature	Tstg	-55~150	°C

Note: Value for mounting on PC board.

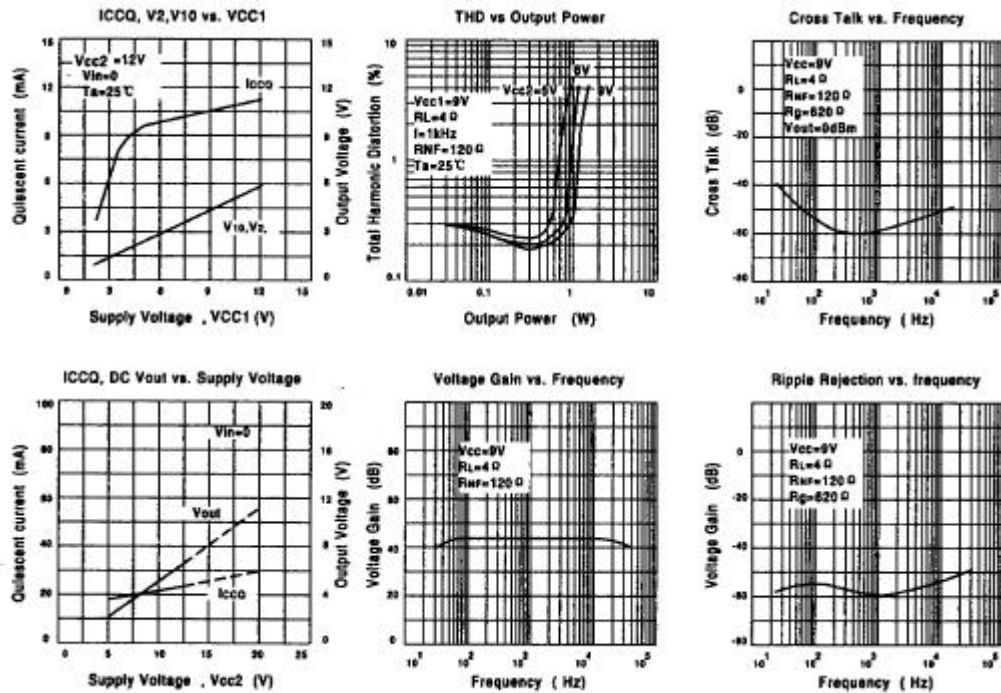
ELECTRICAL CHARACTERISTICS

(Ta=25°C, Vcc=9V, Rg=600Ω, f=1kHz, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Quiescent Current	Icc	Vi=0		21	45	mA
Output Power	Po	THD=10%, RL=4Ω	2.0	2.5		W
		THD=10%, RL=3Ω		3.0		W
Total Harmonic Distortion	THD	Po=0.4W/CH		0.2	1.0	%
Voltage Gain	Gv1	Rf=120Ω, Vout=0.775Vrms	43	45	47	dB
	Gv2	Rf=0, Vout=0.775Vrms		56.5		
Input Impedance	Rin			30		kΩ
Output Noise Voltage	Vno	Rg=10kΩ, BW=20Hz~20kHz		0.3	1.0	mVrms
Ripple Rejection Ratio	R.R	Rg=600Ω, fripple=100Hz		52		dB
Cross Talk	C.T	Rg=600Ω, Vout=0, f=1kHz		50		dB
Input Offset Voltage	V7,8			30	60	mV
Standby Current		Sw1:OFF		1		μA

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TYPICAL PERFORMANCE CHARACTERISTICS



APPLICATION INFORMATION

1. Power ON/OFF

There is power ON/OFF switch at pin 1. However output power is changed by pin 1 supply voltage when pin1 supply voltage is not same pin 12 supply voltage, after referring to attached data, select pin 1 supply voltage.

2. Voltage Gain

The voltage gain can be changed by the external negative feedback resistor. When Rf=0, the Gain is equal to 56.5dB. When Rf=120Ω, the Gain is equal to 45dB.