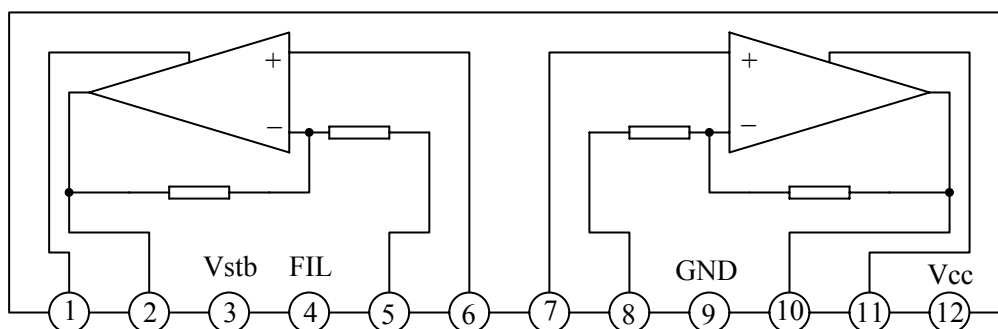


DESCRIPTION

FEATURES

- *High Power: Po(1)=2.5W/CH(Typ.) (Vcc=9V, R_L=4Ω, f=1kHz, THD=10%)
Po(2)=4.6W/CH(Typ.) (Vcc=12V, R_L=4Ω, f=1kHz, THD=10%)
- *Low popping noise at power ON.
- *Small quiescent current: Iccq=19mA(Typ.) (Vcc=9V, Vin=0)
- *Soft clip
- *Built-in thermal shut down protection circuit
- *Operation supply voltage range: Vcc=6V~15V
- *Best for supply voltage: 9V or 12V

BLOCK DIAGRAM



WuXi YouDa Electronics Co., Ltd

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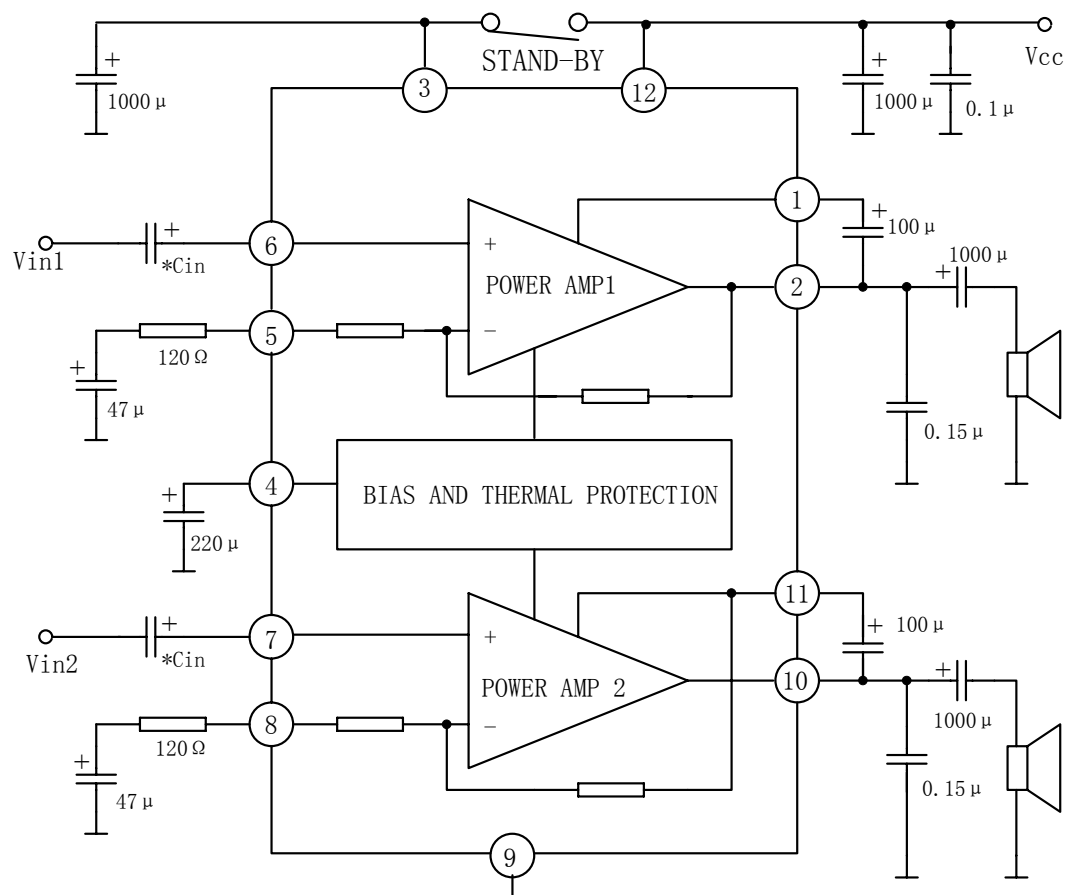
ABSOLUTE MAXIMUM RATINGS (Tamb=25℃)

PARAMETER		SYMBOL	VALUE	UNIT
Supply Voltage		V _{CC}	20	V
Output Peak Current		I _{op}	2.5	A
Power Dissipation	Infinite Heat Sink	P _D	12.5	W
	No Heat Sink		2.0	
Operating Temperature		Topr	-20~+75	℃
Storage Temperature		Tstg	-55~+150	℃

ELECTRICAL CHARACTERISTICS(Unless otherwise specified, V_{CC}=9V, R_L=4Ω, R_g=600Ω, f=1kHz, Tamb=25℃)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Quiescent Current	I _{ccq}	V _{in} =0		19	45	mA
Output Power	P _o	THD=10%,	2.0	2.5		W
		V _{cc} =12V, THD=10%		4.6		
Total Harmonic Distortion	THD	P _o =1W/CH		0.2	1.0	%
Voltage Gain	G _v	R _f =120Ω Vo=0dBm	43	45	47	dB
		R _f =0 Vo=0dBm		56		
Input Resistance	Z _i			30		kΩ
Output Noise Voltage	V _{NO}	R _g =0 BW=20Hz~20kHz		0.3	1.0	mV _s
Ripple Rejection Ratio	RR	f=100Hz R _g =600Ω V _r =0.2V _{rms}		54		dB
Cross Talk	CT	R _g =600Ω, f=1kHz, V _o =0dBm		60		dB
Input Offset Voltage	V ₅ , V ₇			20	60	mV
Standby Current	I _{SBY}			1		μA

APPLICATION CIRCUIT



OUTLINE DRAWING

HSIP12-P-2.54A

Unit : mm

