

Specifications

Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V _{CC} max	No signal	24	V
Maximum output current	I _O peak	Per channel	4	A
Allowable power dissipation	Pd max	With an arbitrarily large heat sink	32.5	W
Operating temperature	T _{opr}		-20 to +85	°C
Storage temperature	T _{stg}		-40 to +150	°C

Operating Conditions at Ta = 25°C

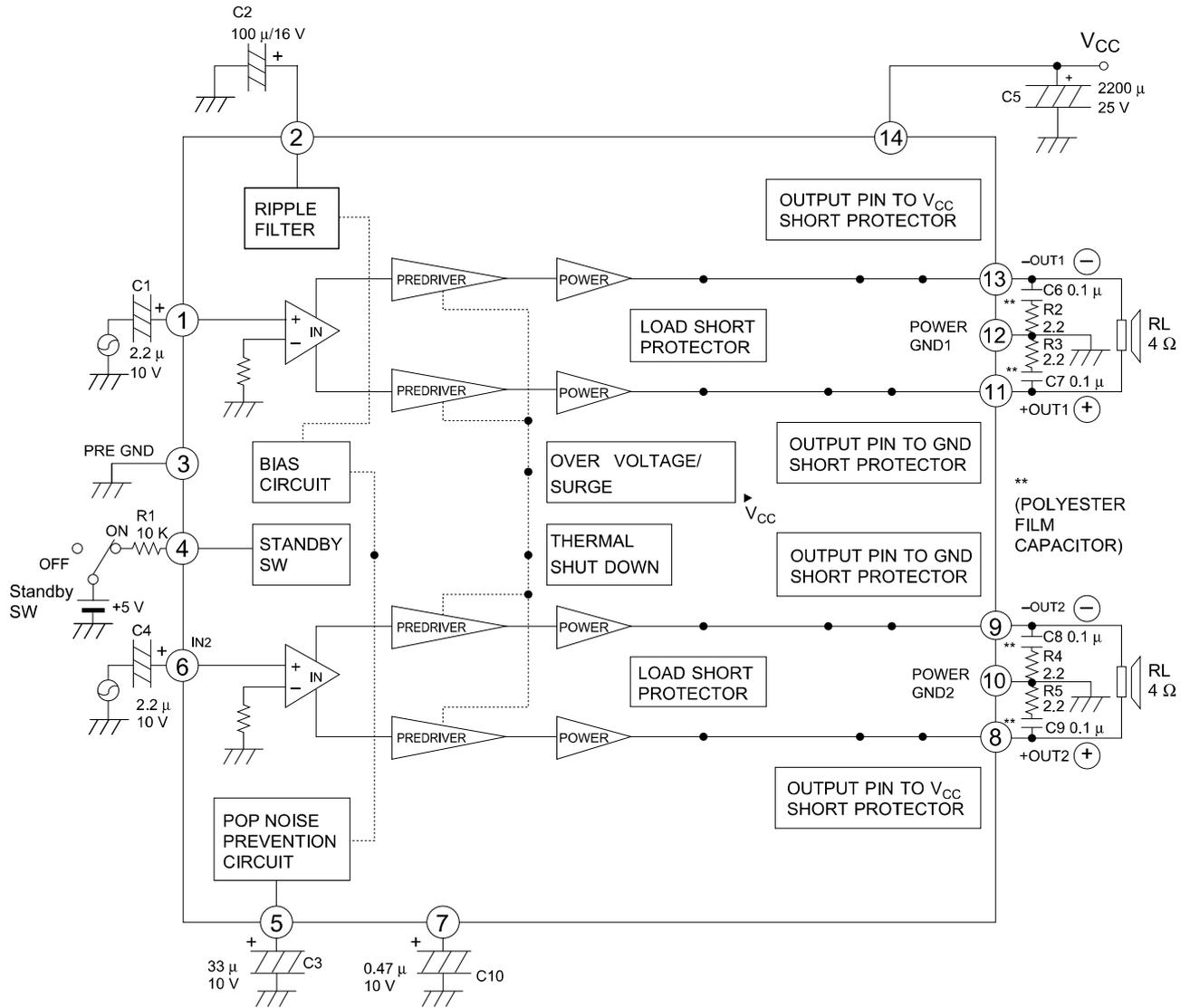
Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	V _{CC}		13.5	V
Recommended load resistance range	R _L op		4 to 8	Ω
Allowable operating supply voltage range	V _{CC} op		9 to 20	V

Note: With V_{CC}, R_L, and the output level in ranges such that the Pdmax for the heat sink used is not exceeded.

Operating Characteristics at Ta = 25°C, V_{CC} = 13.5 V, R_L = 4 Ω, f = 1 kHz, R_g = 600 Ω

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Quiescent current	I _{CCO}	With R _g = 0 and R _L open.	70	130	250	mA
Standby mode current drain	I _{st}	Standby mode (amplifier off), with no power supply capacitor.		10	60	μA
Voltage gain	V _G	V _O = 0 dBm	38	40	42	dB
Total harmonic distortion	THD	P _O = 1 W, Filter = FLAT		0.06	0.2	%
Output power	P _{O1}	V _{CC} = 13.5 V, THD = 10%, R _L = 4 Ω	16	20		W
	P _{O2}	V _{CC} = 16.5 V, THD = 10%, R _L = 4 Ω		30		W
Output offset voltage	V _N offset	R _g = 0	-300		+300	mV
Output noise voltage	V _{NO}	R _g = 0, BPF = 20 Hz to 20 kHz		0.1	0.5	mV
Ripple rejection ratio	SVRR	R _g = 0, V _R = 0 dBm, f _R = 100 Hz	40	50		dB
Channel separation	CH Sep	R _g = 10 kΩ, V _O = 0 dBm	50	60		dB
Input resistance	R _i		21	30	39	kΩ
Standby pin applied voltage	V _{ST}	Amplifier on (applied through an external 10 kΩ resistor)	2.5		V _{CC}	V

Equivalent Circuit Block Diagram



C3
Sets the amplifier starting time
(Approximately 0.6 seconds when 33 μF)

C10
Impulse noise reduction
(Note: The device's ability to withstand shorting to V_{CC} or shorting to ground when V_{CC} is around 16 V may be reduced as the value of this capacitor is increased. We recommend 0.47 μF.)