

DUAL EQUALIZER AMPLIFIER WITH ALC

—— YD3308F

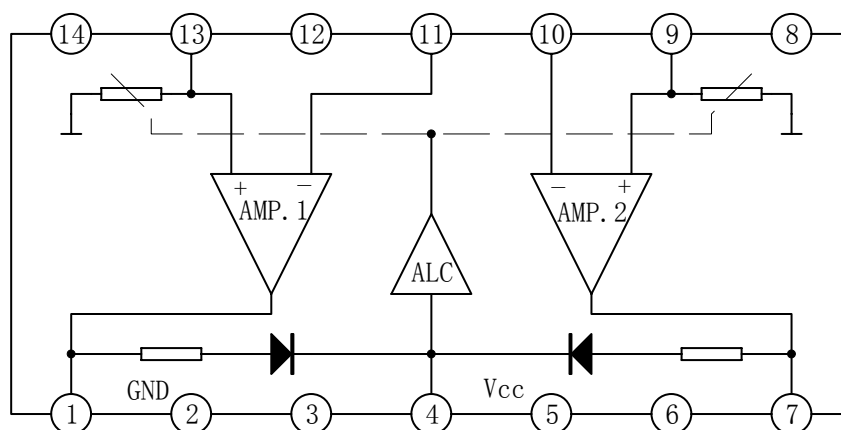
DESCRIPTION

The YD3308F is a monolithic integrated circuit consisting of dual equalizer amplifier with ALC. It is suitable for stereo radio cassette tape recorder.

FEATURES

- *Dual equalizer amplifier with built-in ALC circuit
- *Low noise $V_{NI}=1.0\mu V$ (typ.)
- *High open loop voltage gain: $G_{vo}=80dB$ (typ.)
- *Power voltage range: 4.5~14V
- *Good ALC response balance between channels
- *Not necessary the diode of transistor for ALC
- *Built in power supply muting circuit
- *Minimum number of external parts required
- *Package: SOP14

BLOCK DIAGRAM



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YODA INTEGRATED CIRCUIT**YD3308F****ABSOLUTE MAXIMUM RATINGS** (Tamb=25°C)

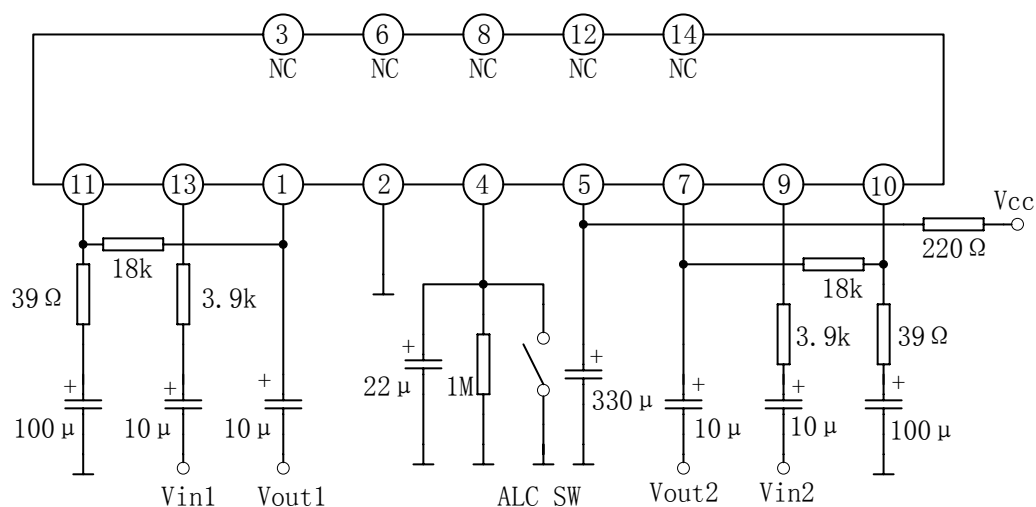
PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	V _{CC}	16	V
Power Dissipation	P _D	550	mW
Operating Temperature	T _{opr}	-20~+75	°C
Storage Temperature	T _{stg}	-40~+125	°C

ELECTRICAL CHARACTERISTICS

(Tamb=25°C, Vcc=9V, f=1kHz, Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Quiescent Current	I _{ccq}	V _i =0	1.5	3.5	4.5	mA
Open Loop Voltage Gain	G _{vo}	V _o =0.3V	70	80		dB
Closed Loop Voltage Gain	G _{vc}	V _o =0.3V	45	48	50	dB
Output Voltage	V _o	THD=1%	0.6	1.2		V
Total Harmonic Distortion	THD	V _o =0.3V		0.1	0.3	%
Input Noise Voltage	V _{Ni}	R _g =2.2k Ω , BW=20Hz~20kHz		1.0	2.0	μ V
Input Resistance	Z _i		15	25	45	k Ω
ALC Range	Δ V _{ALC}	R _g =3.9k Ω , THD=10%	40	45		dB
ALC Balance	Δ G _v	V _{in} =1mV		0	2.5	dB

APPLICATION CIRCUIT



OUTLINE DRAWING

SOP-14

unit:mm

