



**National
Semiconductor
Corporation**

LM377 Dual 2 Watt Audio Amplifier

General Description

The LM377 is a monolithic dual power amplifier which offers high quality performance for stereo phonographs, tape players, recorders, and AM-FM stereo receivers, etc.

The LM377 will deliver 2W/channel into 8 or 16 Ω loads. The amplifier is designed to operate with a minimum of external components and contains an internal bias regulator to bias each amplifier. Device overload protection consists of both internal current limit and thermal shutdown. For more information, see AN-125.

Features

- A_{VO} typical 90 dB
- 2W per channel
- 70 dB ripple rejection
- 75 dB channel separation
- Internal stabilization

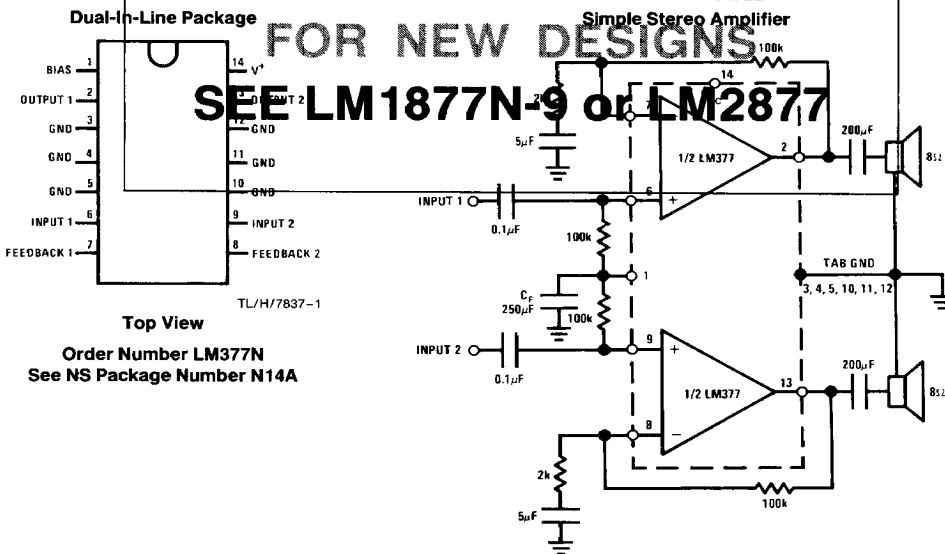
- Self centered biasing
- 3 M Ω input impedance
- 10–26V operation
- Internal current limiting
- Internal thermal protection

Applications

- Multi-channel audio systems
- Tape recorders and players
- Movie projectors
- Automotive systems
- Stereo phonographs
- Bridge output stages
- AM-FM radio receivers
- Intercoms
- Servo amplifiers
- Instrument systems

Connection Diagram

Typical Application



TL/H/7837-2