

LM1876 *Overture*™ Audio Power Amplifier Series

Dual 20W Audio Power Amplifier with Mute and Standby Modes

General Description

The LM1876 is a stereo audio amplifier capable of delivering typically 20W per channel of continuous average output power into a 4Ω or 8Ω load with less than 0.1% (THD + N). Each amplifier has an independent smooth transition fade-in/out mute and a power conserving standby mode which can be controlled by external logic.

The performance of the LM1876, utilizing its Self Peak Instantaneous Temperature (°Ke) (SPiKe™) Protection Circuitry, places it in a class above discrete and hybrid amplifiers by providing an inherently, dynamically protected Safe Operating Area (SOA). SPiKe Protection means that these parts are safeguarded at the output against overvoltage, undervoltage, overloads, including thermal runaway and instantaneous temperature peaks.

Key Specifications

- THD + N at 1 kHz at 2 x 15W continuous average output power into 4Ω or 8Ω 0.1% (max)
- THD + N at 1 kHz at continuous average output power of 2 x 20W into 8Ω 0.009% (typ)
- Standby current 4.2 mA (typ)

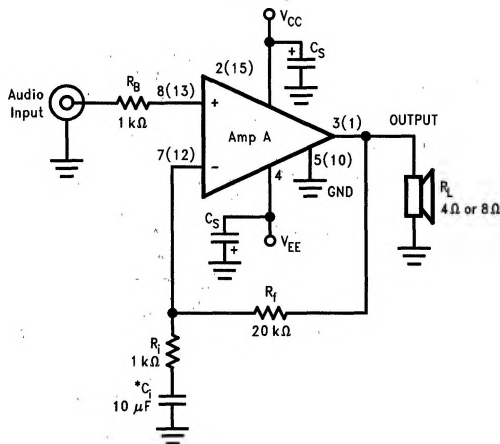
Features

- SPiKe Protection
- Minimal amount of external components necessary
- Quiet fade-in/out mute mode
- Standby-mode
- Isolated 15-lead TO-220 package

Applications

- High-end stereo TVs
- Component stereo
- Compact stereo

Typical Application



TL/H/12072-1

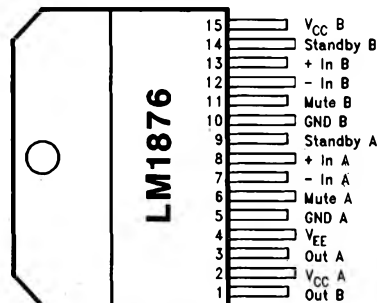
FIGURE 1. Typical Audio Amplifier Application Circuit

Note: Numbers in parentheses represent pinout for amplifier B.

*Optional component dependent upon specific design requirements.

Connection Diagram

Isolated Plastic Package



Top View

TL/H/12072-2

Order Number LM1876TF
See NS Package Number TF15B