

LM4765 Overture™

Audio Power Amplifier Series Dual 30W Audio Power Amplifier with Mute and Standby Modes

General Description

The LM4765 is a stereo audio amplifier capable of delivering typically 30W per channel of continuous average output power into an 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 LM4765, 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 1kHz at 2 x 25W continuous average output power into 8Ω: 0.1% (max)
- THD+N at 1kHz at continuous average output power of 2 x 30W into 8Ω: 0.009% (typ)
- Standby current: 6.5mA (typ)

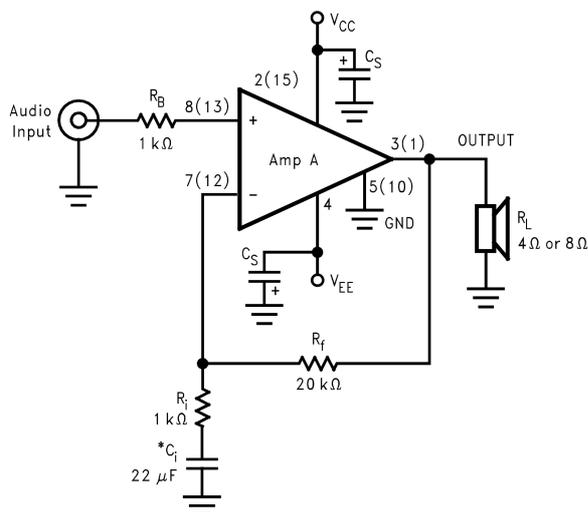
Features

- SPiKe Protection
- Minimal amount of external components necessary
- Quiet fade-in/out mute mode
- Standby-mode
- Non-Isolated 15-lead TO-220 package
- Wide supply range 20V - 66V

Applications

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

Typical Application

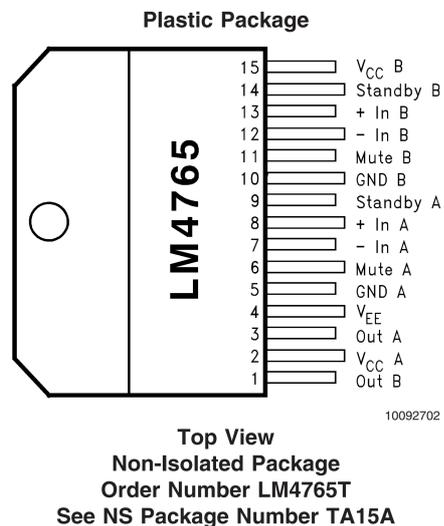


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Numbers in parentheses represent pinout for amplifier B.
*Optional component dependent upon specific design requirements.

FIGURE 1. Typical Audio Amplifier Application Circuit

Connection Diagram



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