

## LM4700 Overture™ Audio Power Amplifier Series

### 30W Audio Power Amplifier with Mute and Standby Modes

#### General Description

The LM4700 is an audio power amplifier capable of delivering typically 30W of continuous average output power into an 8Ω load with less than 0.8% (THD + N) from 20 Hz to 20 kHz.

The LM4700 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 LM4700, 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 completely safeguarded at the output against overvoltage, undervoltage, overloads, including thermal runaway and instantaneous temperature peaks.

#### Key Specifications

- Typical THD+N from 20 Hz to 20 kHz at 30W of continuous average output power into 8Ω 0.08% (typ)
- THD+N at 1 kHz at continuous average output power of 25W into 8Ω 0.1% (max)
- THD+N at 1 kHz at a continuous average output power of 30W into 8Ω 0.009% (typ)

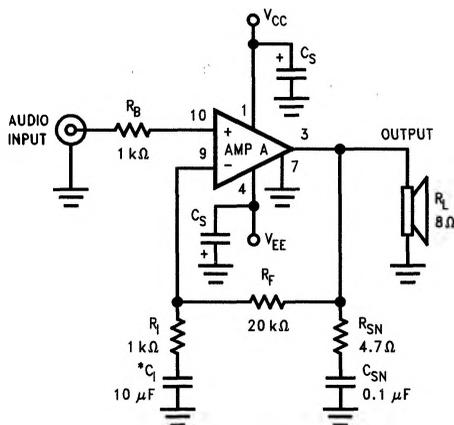
#### Features

- SPiKe Protection
- Minimal amount of external components necessary
- Quiet fade-in/out mute function
- Power conserving standby-mode
- 11-lead TO-220 isolated package

#### Applications

- Component stereo
- Compact stereo

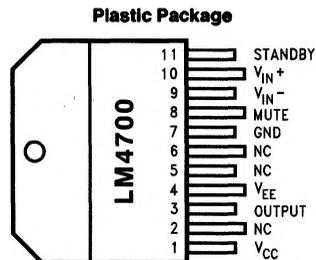
#### Typical Application



TL/H/12369-1

FIGURE 1. Typical Audio Amplifier Application Circuit

#### Connection Diagram



Top View

Order Number LM4700TF  
See NS Package Number TF11B

TL/H/12369-2