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TPA2037D1YFFT Audio Power Amplifier

General Description:

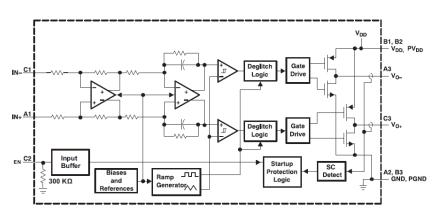
The TPA2037D1 is a 3.2 W high efficiency filter-free class-D audio power amplifier (class-D amp) with 6 dB of fixed gain in a 1.21 mm x 1.16 mm wafer chip scale package (WCSP). The device requires only one external component.

Features like 95% efficiency, 1.5 mA quiescent current, 0.1 μ A shutdown current, 81-dB PSRR, 20 μ V output noise, and improved RF immunity make the TPA2037D1 class-D amplifier ideal for cellular handsets. A start-up time of 4 ms with no audible pop makes the TPA2037D1 ideal for PDA and smart-phone applications.



Key Features:

- Powerful Mono Class-D Speaker Amplifier
 - > 3.24 W (4 Ω, 5 V, 10% THDN)
 - 2.57 W (4 Ω, 5 V, 1% THDN)
 - 1.80 W (8 Ω, 5 V, 10% THDN)
 - 1.46 W (8 Ω, 5 V, 1% THDN)
- +6 dB Fixed Gain
- Integrated Image Reject Filter for DAC Noise Reduction
- Low Output Noise of 20 μV
- Low Quiescent Current of 1.5 mA
- Differential Input Impedance of 300 kΩ
- Auto-Recovering Short-Circuit Protection
- Thermal-Overload Protection
- Filter-Free Mono Class-D Amp
- 9-Ball 1,21 mm × 1,16 mm 0,4mm Pitch WCSP



Applications:

- Wireless or Cellular Handsets and PDAs
- Portable Navigation Devices
- General Portable Audio Devices

Related Products Information:

Mfr Part #	Farnell #	Newark #	Description
TPA2037D1YFFT	1782837	51R5928	Audio Power Amplifier IC
TPA2037D1YFFR	NA	55R7547	Audio Power Amplifier IC

