

Product Overview

NCP2823: Audio Power Amplifier, 3.0 W, Filterless, Class D

For complete documentation, see the data sheet.

The NCP2823A/B are cost effective mono audio power amplifiers designed for portable electronic devices. NCP2823A is optimized for 8 Ω operation and NCP2823B can operate with speaker impedance down to 4.0 Ω . For Instance, NCP2823B is capable of delivering 3 W of continuous average power to a 4.0 Ω from a 5.0 V supply in a Bridge Tied Load (BTL) configuration. Under the same conditions, NCP2823A can provide 1.5 W to an 8.0 Ω BTL load with less than 10% THD+N. For cellular handsets or PDAs it offers space and cost savings because no output filter is required when using inductive transducers. With more than 90% efficiency and very low shutdown current, it increases the lifetime of your battery and drastically lowers the junction temperature.

Features

- Optimized PWM output stage
- High efficiency: up to 92%
- High PSRR: -77dB
- High CMRR: -80dB
- Adjustable gain

Benefits

- Filterless capability
- Save battery life
- Reject noise from power supply
- High audio fidelity

Applications

- Audio Amplification

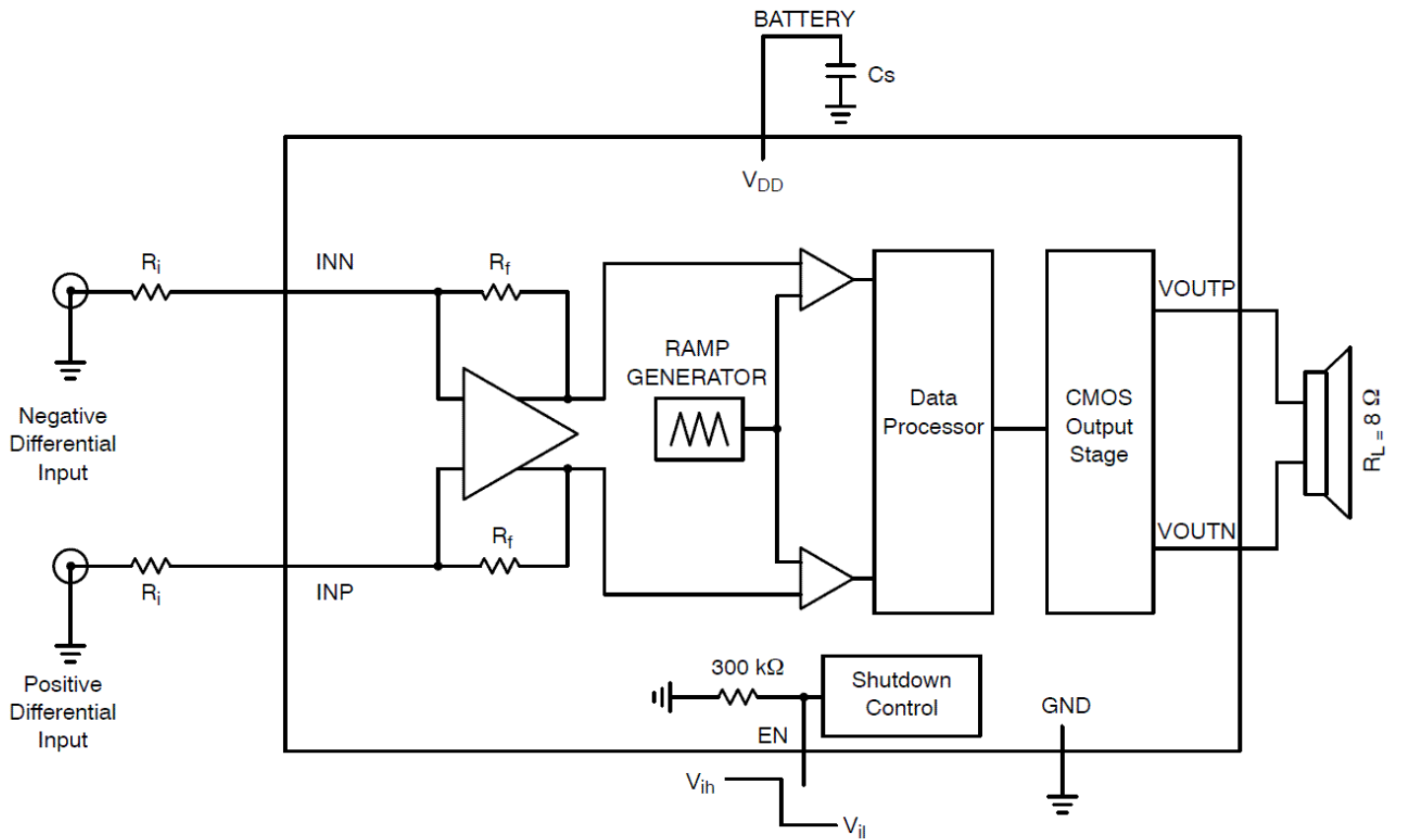
End Products

- Cellular phones
- Portable Media/ Audio Player
- Portable navigation system
- Portable game

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Class	Output Power Typ (W)	V _{CC} Max (V)	Output Type	t _{on} Typ (ms)	THD + N Typ (%)	I _O Typ (mA)	I _{SD} Typ (nA)	Package Type
NCP2823AFCCT2G	0.26	Pb-free Halide free non AEC-Q and PPAP	Active	D	1.5	5.5	BTL	7.4	0.08	1.8	10	Flip-Chip-9
NCP2823AFCT2G	0.2787	Pb-free Halide free non AEC-Q and PPAP	Active	D	1.5	5.5	BTL	7.4	0.08	1.8	10	Flip-Chip-9
NCP2823BFCT1G	0.2753	Pb-free Halide free non AEC-Q and PPAP	Active	D	3	5.5	BTL	7.4	0.08	2.6	10	Flip-Chip-9
NCP2823BFCT2G	0.2787	Pb-free Halide free non AEC-Q and PPAP	Active	D	3	5.5	BTL	7.4	0.08	2.6	10	Flip-Chip-9

Application Diagram



For more information please contact your local sales support at www.onsemi.com.

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