



3W Mono Class-D Audio Amplifier

The PAM8304 is a mono filter-less Class-D amplifier with high SNR and differential input that helps eliminate noise. It supports 2.8V to 6V operations making it ideal for up to four cell battery applications.

It is capable of driving speaker loads as low as 3Ω at 5V supply, maximizing the output power.

The device features 90% efficiency and a small PCB area which make the PAM8304 Class-D amplifier ideal for portable applications. The output uses a filter-less architecture minimizing the number of external components and PCB area whilst providing a high performance, simple and lower cost system.

The PAM8304 features short circuit protection, thermal shutdown and under voltage lock-out.

It is available in DFN3030-8L and MOP-8L packages.



The Diodes Advantage

The PAM8304 provides a simple solution for power audio amplifiers.

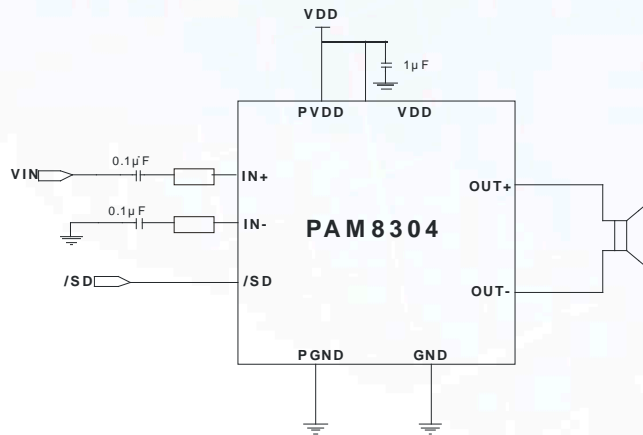
- **Speaker load driving capability as low as 3Ω**
Higher output power and speaker flexibility
- **2.8V to 6V supply range**
Supports up to four cell battery applications
- **Up to 95dB SNR and -70dB PSRR**
- **VDD over voltage, UVLO and over temperature protection**
Full protection prevents chip damage

Applications

- MP4/MP3
- GPS
- Set-Top-Box
- Tablets/Digital photo frame
- Electronic dictionary
- Portable game machines



Typical Application:



Diodes Medium Power Class-D Audio Amplifier

Product	Description	VIN (V)	IQ (mA)	η	GAIN (dB)	SNR (dB)	PSRR (dB)	Package
PAM8301	1x1.5W with EN Control	2.5 - 5.5	4	88%	24	78	-50	SOT23-6
PAM8302L	1x2.5W Low VDD Class D Amplifier	2.0 - 5.5	4	88%	24	80	-50	DFN3*3-8 MSOP-8
PAM8303C PAM8303D	1x3W Class D Amplifier with Differential Input	2.8 - 5.5	5	90%	300kΩ/Ri	80	-65	WCSP-9 MSOP-8
PAM8304	1x3W Class D Amplifier with Differential Input	2.8 – 6.0	5	90%	300kΩ/Ri	95	-70	DFN3*3-8 MSOP-8
PAM8012	1x3W with PL & Anti-saturation	2.8-5.5	10	89%	-75 - +24	90	-70	CSP1.2x1.2

To find out more information:

Datasheet: <http://www.diodes.com/datasheets/PAM8304.pdf>

Ordering Information

Device	Packaging	Part mark	Reel size	Tape width	Quantity
PAM8304AYR	DFN3030-8L	PAM8304	7"	8mm	3,000
PAM8304ASR	MSOP-8L	PAM8304	13"	12mm	2,500