



3.2W Mono Class-D Audio Amplifier

The PAM8014 is a 3.2W mono filterless class-D amplifier with high PSRR and differential input that eliminates noise and RF reflections.

Features such as: greater than 90% efficiency and small PCB area, make the PAM8014 Class-D amplifier ideal for portable applications. The output uses filterless architecture, minimizing the number of external components and PCB area while providing a high performance, simple and lower cost system.

The PAM8014 features short circuit protection and thermal shutdown.

The PAM8014 is available in the U-WLB1313-9 package.



The Diodes Advantage

The PAM8014 small and highly integrated solution provides an audio output of 3.2 watts

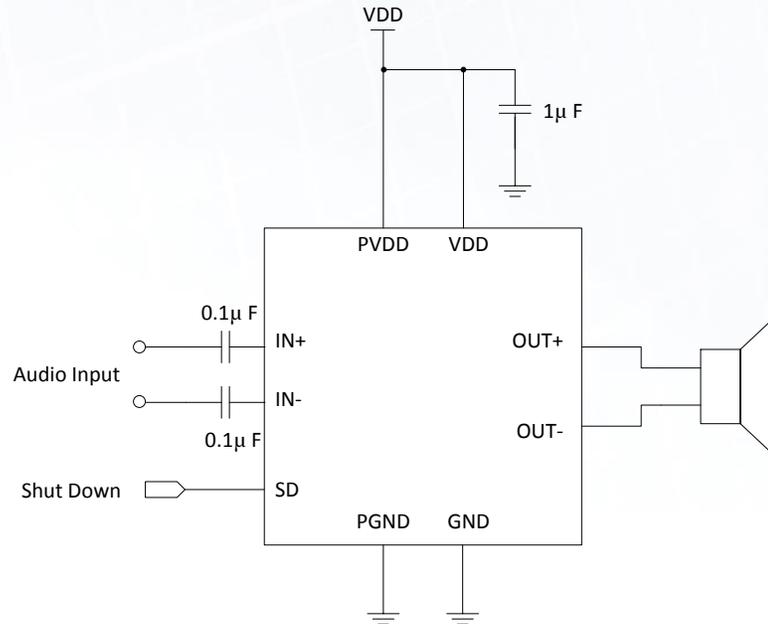
- **High efficiency of up to 93%**
 - Maximizes battery life
- **3.2W output with 5V supply and 4Ω loading**
 - One of the highest power to size ratio Class D amplifiers in the market
- **Tiny 1.3mm x 1.3mm WLCSP package**
 - Saves PCB area and provides high reliability
- **18dB fixed gain**
 - No external input resistor needed to minimize external component
- **Chip and System Protection**
 - Full short-circuit protection with auto recovery, UVLO and overtemperature protection

Applications

- Smartphones
- VOIP
- Electronic dictionary
- MP4/MP3
- Digital photo frame
- Portable game machines



Typical Application:



Diodes Portable Power Class-D Audio Amplifier

Product	Description	VIN (V)	IQ (mA)	η	GAIN (dB)	SNR (dB)	PSRR (dB)	Packaging
PAM8012	1 x 3W with PL & Anti-saturation	2.8-5.5	10	89%	18	90	70	U-WLB1313-9
PAM8014	1 x 3.2W Class D Audio Amplifier	2.5-5.5	4	93%	18	90	75	U-WLB1313-9
PAM8905	1.9W Class-D Audio Amplifier with Integrated Boost Converter and Battery Tracking AGC	2.8-5.2	4	85%	20	95	70	WCSP15x20
PAM8945	4.0W Class-D Audio Amplifier with Integrated Boost Converter and Battery Tracking AGC	2.8-5.2	4	85%	20	95	70	TQFN2030

Ordering Information

Device	Package	Part Mark	Reel Size	Tape Width	Quantity
PAM8014AZR	U-WLB1313-9	BJ	7"	8mm	3,000