

# 18W内置升压单声道D类音频功放

### 18W Boosted Mono Class D Amplifier

#### **■ FEATURES**

- Spread spectrum technology
- Output Power

18W ( $V_{BAT}$ =3.7V,  $R_{L}$ =4 $\Omega$ , THD+N=10%,  $f_{IN}$  = 1kHz) 16W ( $V_{BAT}$ =3.7V,  $R_{L}$ =4 $\Omega$ , THD+N=1%,  $f_{IN}$  = 1kHz) 8W ( $V_{BAT}$ =3.3V,  $R_{L}$ =8 $\Omega$ , THD+N=1%,  $f_{IN}$  = 1kHz)

- Power Supply V<sub>BAT</sub>: 3.0V~12V
- · High Efficiency Boost Converter
  - -Adjustable switch peak current limit to avoid over-pulling on battery current
- Over Current Protection, Thermal Protection, over voltage protection function included
- Pb-Free Packages, ESOP16

- ・扩频技术
- ・输出功率

18W ( $V_{BAT}$ =3.7V,  $R_{L}$ =4 $\Omega$ , THD+N=10%,  $f_{IN}$  = 1kHz) 16W ( $V_{BAT}$ =3.7V,  $R_{L}$ =4 $\Omega$ , THD+N=1%,  $f_{IN}$  = 1kHz) 8W ( $V_{BAT}$ =3.3V,  $R_{L}$ =8 $\Omega$ , THD+N=1%,  $f_{IN}$  = 1kHz)

- · VBAT供电范围: 3.0V至12V
- · 高效升压功能
- -可调节最大限流值,有效防止电池拉死
- ·保护功能:过流/过热/过压保护功能
- ·无铅封装, ESOP16

#### APPLICATIONS

- Bluetooth/Wi-Fi Speakers
  Portable Speakers
- Smart speakers
- Smart Home
- · 蓝牙/ Wi-Fi音箱
- ・便携式音箱

·智能音箱

・智能家居

#### DESCRIPTION

HT81297F, integrated with a boost converter, is a mono Class D audio amplifier that drives up to continuous 18W (10% THD+N, 1kHz) into 4ohm speaker from a Li-battery voltage. The output voltage of boost converter is forced into 9V or 12V and it provides to the class D amplifier. Configurable current limit is adopted to avoid accidental large peak current.

HT81297F integrates Spread Spectrum Control technology to achieve advanced EMI suppression. The Gain of HT81297F is 32dB.

As for protection function, over current protection function for speaker output terminals, over temperature protection function and over voltage protection for boost converter output are also prepared.

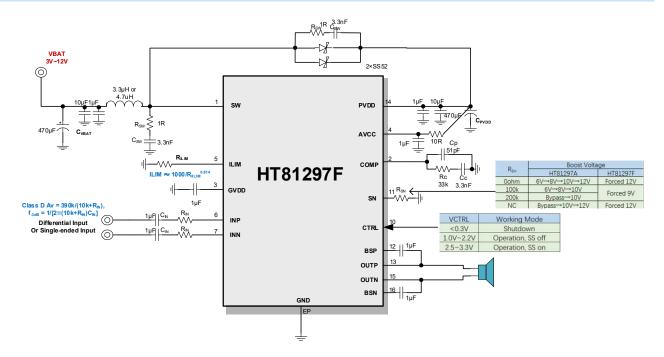
HT81297F是一款内置升压的单声道D类音频功率放大器,由锂电池供电时,THD+N=10%,能连续输出18W功率(4Ω负载)。HT81297F则内置固定升压,提供一个固定9V或12V的升压给D类功放。HT81297F可配置升压限流值,以防止过大的电流尖峰。

HT81297F具有先进的扩频功能来抑制EMI。 HT81297F的增益为32dB。

此外, HT81297F集成了输出端过流保护、片内过温保护、升压过压保护等功能。



### **■ TYPICAL APPLICATION**

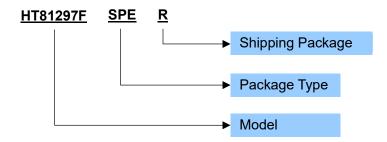




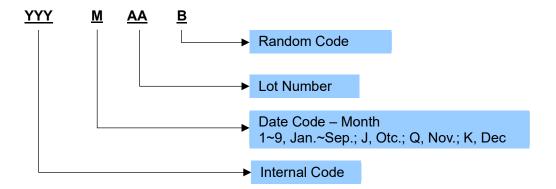
### **■ ORDERING INFORMATION**

Part Number	Package Type	Marking	Operating Temperature Range	Shipping Package / MOQ
HT81297FSPER	ESOP16 (SPE)	HT81297F YYYMAAB <sup>1</sup>	-40℃~85℃	Tape and Reel (R) / 2500pcs

### **Part Number**



### **Production Tracking Code**



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<sup>&</sup>lt;sup>1</sup> YYYMAAB is production tracking code



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