

免电感滤波2×20W D类立体声音频功放

2×20W Inductor Free Class D Stereo Amplifier

■ FEATURES

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">· Output Power (BTL)
2×20W (VDD=14.5V, RL=4Ω, THD+N=1%)· Single Wide Voltage Supply: 4.5V-18V;· Efficiency > 90%· Differential / Single-ended Analog Input· Gain: 32dB· Spread Switching Frequency For Inductor Free· Integrated Self-protection Circuits Including Overvoltage, Undervoltage, Overtemperature, DC-detect, and Overcurrent with Error Reporting· LF and HF Package of ESOP16 | <ul style="list-style-type: none">· 输出功率 (BTL模式)
2×20W (VDD=14.5V, RL=4Ω, THD+N=1%)· 单电源系统: 4.5V-18V;· 超过90%效率, 无需散热器· 扩频功能, 免电感滤波· 模拟差分/单端输入可选· 增益: 32dB· 保护功能: 过压/过流/过热/欠压异常, 直流检测和短路保护· 无铅无卤封装, ESOP16 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

■ APPLICATIONS

- | | | | |
|-------------------------------|---------------------|---------|-------------|
| · Sound Bars | · Wireless Speakers | · 条形音箱 | · 无线智能音箱 |
| · Consumer Audio Applications | | · 便携式音箱 | · 消费类音频应用 |
| · TVs/Monitors | | · 拉杆音箱 | · LCD电视/视器监 |

■ DESCRIPTION

HT326A is a stereo efficient, Class-D audio amplifier for driving speakers up to 2×20W/4Ω power.

Advanced EMI Suppression with Spread Spectrum Control enables the use of inexpensive ferrite bead filters while meeting EMC requirements for system cost reduction.

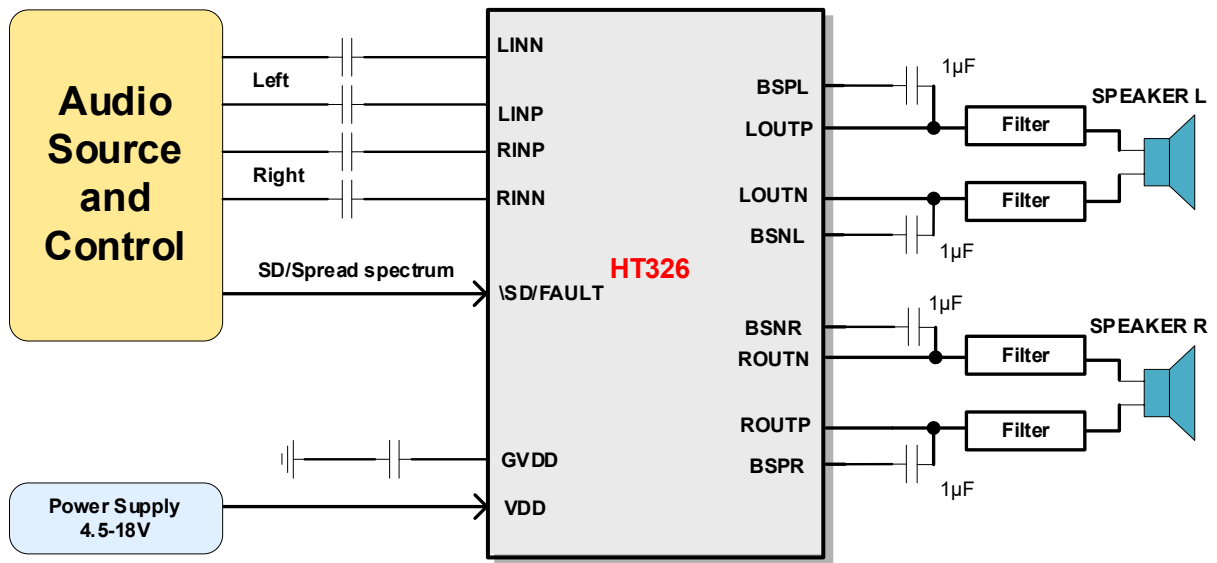
HT326A is fully protected against faults with Overvoltage, Undervoltage, Overtemperature, DC-detect, and Overcurrent protection. Faults can be reported to the processor to prevent devices from being damaged.

HT326A是一款高效D类音频功率放大器。在14.5V供电的、THD+N=1%条件下, 能够持续提供2*20W/4Ω功率输出。

HT326A具有先进的扩频功能来抑制EMI, 使用价格低廉且小体积铁氧体磁珠可满足EMC要求。

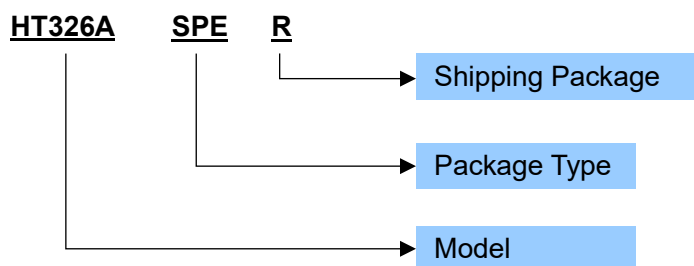
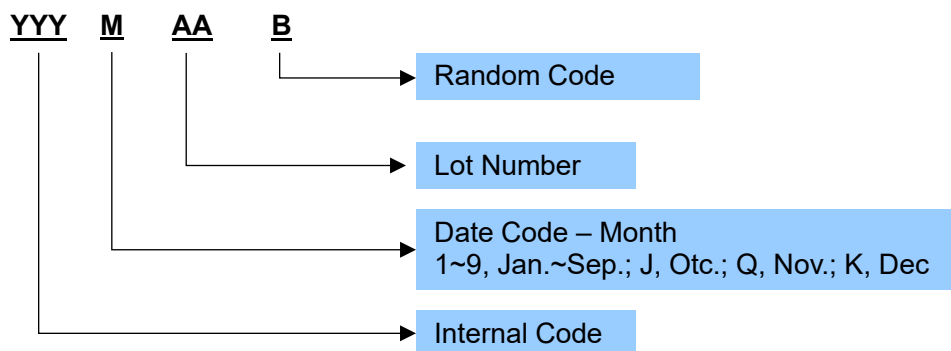
此外, HT326A内置关断功能使待机电流最小化, 还集成了过压保护、直流保护、短路保护、热保护和电源欠压异常保护等功能, 可全面防止出现故障。

■ TYPICAL APPLICATION

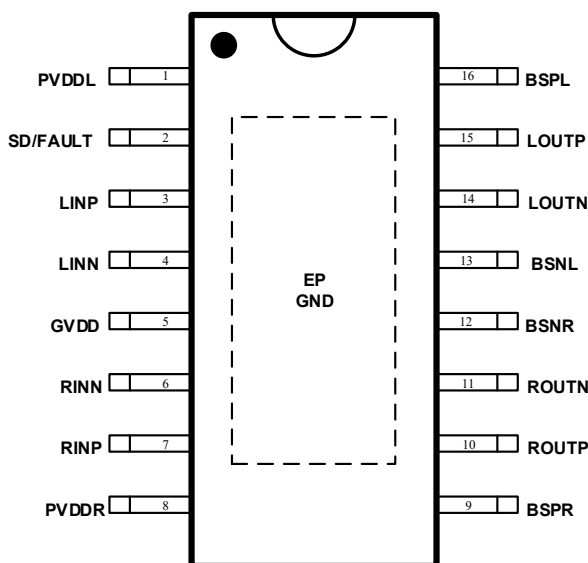


ORDERING INFORMATION

Part Number	Package Type	Marking	Shipping Package / MOQ
HT326ASPER	ESOP16 (SPE)	HT326A YYYMAAB ¹	Tape and Reel (R) / 2500pcs

Part Number

Production Tracking Code


■ TERMINAL CONFIGURATION



HT326A Top View

■ TERMINAL FUNCTION

Terminal No.	Name	I/O ¹	Description
1	PVDDL	P	Power Supply for internal power circuitry of Channel L. 左声道功率电源
2	\SD/FAULT	I	SD/FAULT, multi-function pin. When pulled down, place the speaker amplifier in shutdown mode. General fault reporting including Over-Temp, Over-Current, DC Detect. 接地时功放关闭。发生过温、过流、DC等保护时，该引脚拉低
3	LINP	I	Positive input terminal for L channel. 左声道输入正端
4	LINN	I	Negative input terminal for L channel. 左声道输入负端
5	GVDD	O	Voltage regulator derived from PVDD supply. 内部整流输出，接1uF电容到地
6	RINN	I	Negative input terminal for R channel. 右声道输入负端
7	RINP	I	Positive input terminal for R channel. 右声道输入正端
8	PVDDR	P	Power Supply for internal power circuitry of Channel R. 右声道功率电源
9	BSPL	BST	Connection point for the ROUTP bootstrap capacitor, which is used to create a power supply for the high-side gate drive for ROUTP. ROUTP自举电容位
10	ROUTP	O	Positive pin for differential speaker amplifier output R. 右声道输出正端
11	ROUTN	O	Negative pin for differential speaker amplifier output R. 右声道输出负端
12	BSNR	BST	Connection point for the ROUTN bootstrap capacitor, which is used to create a power supply for the high-side gate drive for ROUTN. ROUTN自举电容位
13	BSNL	BST	Connection point for the LOUTLN bootstrap capacitor, which is used to create a power supply for the high-side gate drive for LOUTN. LOUTN自举电容位
14	LOUTN	O	Negative pin for differential speaker amplifier output L. 左声道输出负端
15	LOUTP	O	Positive pin for differential speaker amplifier output L. 左声道输出正端
16	BSPL	BST	Connection point for the LOUPT bootstrap capacitor, which is used to create a power supply for the high-side gate drive for LOUPT. LOUPT自举电容位
EP	GND	G	Provides both electrical and thermal connection from the device to the Board, make sure it is connected to the system ground. 既是地，又是散热PAD

¹ I: Input; O: Output; G: Ground; P: Power; BST: BOOT Strap; OD: Open drain

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禾润电子科技（嘉兴）股份有限公司
Heroic Electronic Technology (Jiaxing) Co., Ltd.

地址：浙江省嘉兴市南湖区亚太路906号科创CBD园区21号楼11层

Add: 11th floor, Building 21, No. 906, Yatai Road, Jiaxing, Zhejiang Province

Sales: 0573-82586608, sales@heroic.com.cn

Support: 0573-82586151, support@heroic.com.cn

Website: www.heroic.com.cn; wap.heroic.com.cn

Wechat MP: HEROIC_JX

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免电感滤波2×20W D类立体声音频功放

2×20W Inductor Free Class D Stereo Amplifier

■ FEATURES

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| · Output Power (BTL)
2×20W (VDD=14.5V, RL=4Ω, THD+N=1%) | · 输出功率 (BTL模式)
2×20W (VDD=14.5V, RL=4Ω, THD+N=1%) |
| · Single Wide Voltage Supply: 4.5~20V | · 单电源系统: 4.5~20V |
| · Efficiency > 90% | · 超过90%效率, 无需散热器 |
| · Differential / Single-ended Analog Input | · 扩频功能, 免电感滤波 |
| · Gain: 32dB | · 模拟差分/单端输入可选 |
| · Spread Switching Frequency For Inductor Free | · 增益: 32dB |
| · Integrated Self-protection Circuits Including
Overvoltage, Undervoltage, Overtemperature, DC-
detect, and Overcurrent with Error Reporting | · 保护功能: 过压/过流/过热/欠压异常, 直流检测
和短路保护 |
| · LF and HF Package of ESOP16 | · 无铅无卤封装, ESOP16 |

■ APPLICATIONS

- | | | | |
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■ DESCRIPTION

HT326C is a stereo efficient, Class-D audio amplifier for driving speakers up to 2×20W/4Ω power.

Advanced EMI Suppression with Spread Spectrum Control enables the use of inexpensive ferrite bead filters while meeting EMC requirements for system cost reduction.

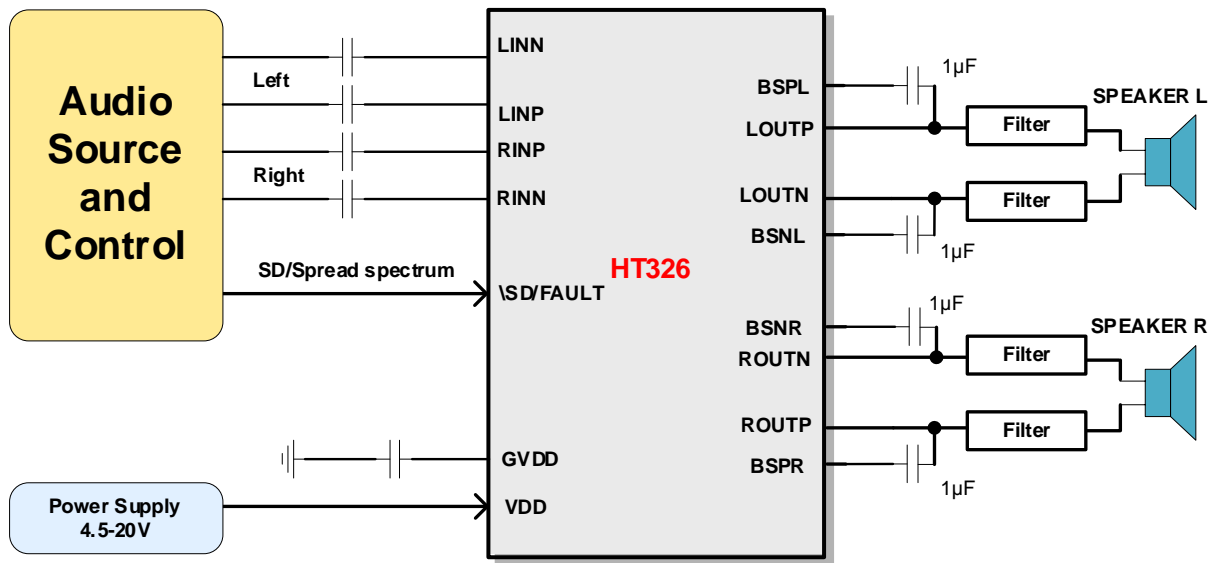
HT326C is fully protected against faults with Overvoltage, Undervoltage, Overtemperature, DC-detect, and Overcurrent protection. Faults can be reported to the processor to prevent devices from being damaged.

HT326C是一款高效D类音频功率放大器。在14.5V供电的、THD+N=1%条件下, 能够持续提供2*20W/4Ω功率输出。

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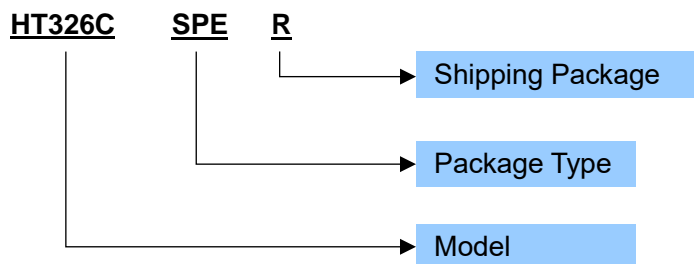
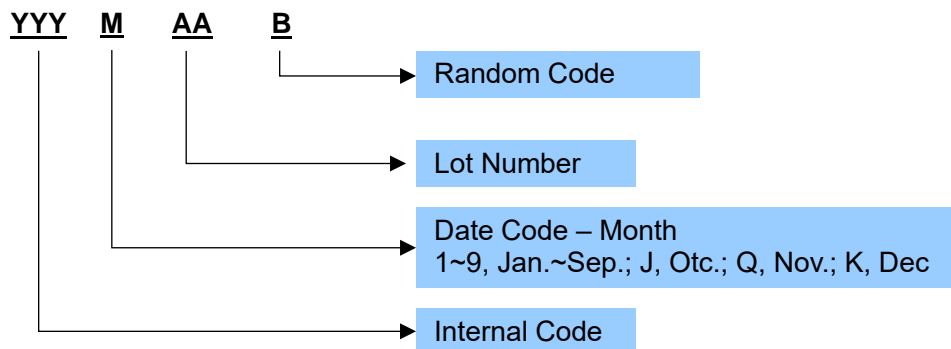
此外, HT326C内置关断功能使待机电流最小化, 还集成了过压保护、直流保护、短路保护、热保护和电源欠压异常保护等功能, 可全面防止出现故障。

■ TYPICAL APPLICATION

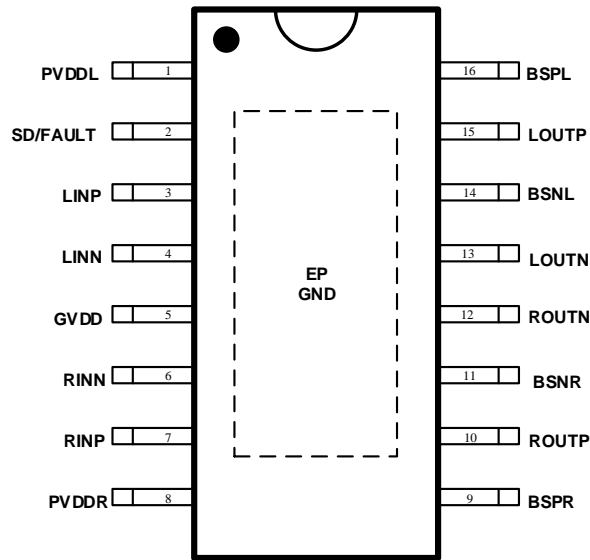


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Part Number	Package Type	Marking	Shipping Package / MOQ
HT326CSPER	ESOP16 (SPE)	HT326C YYYMAAB ¹	Tape and Reel (R) / 2500pcs

Part Number

Production Tracking Code


■ TERMINAL CONFIGURATION



HT326C Top View

■ TERMINAL FUNCTION

Terminal No.	Name	I/O ¹	Description
1	PVDDL	P	Power Supply for internal power circuitry of Channel L. 左声道功率电源
2	SD/FAULT	I	SD/FAULT, multi-function pin. When pulled down, place the speaker amplifier in shutdown mode. General fault reporting including Over-Temp, Over-Current, DC Detect. 接地时功放关闭。发生过温、过流、DC等保护时，该引脚拉低
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7	RINP	I	Positive input terminal for R channel. 右声道输入正端
8	PVDDR	P	Power Supply for internal power circuitry of Channel R. 右声道功率电源
9	BSPR	BST	Connection point for the ROUTP bootstrap capacitor, which is used to create a power supply for the high-side gate drive for ROUTP. ROUTP自举电容位
10	ROUTP	O	Positive pin for differential speaker amplifier output R. 右声道输出正端
11	BSNR	BST	Connection point for the ROUTN bootstrap capacitor, which is used to create a power supply for the high-side gate drive for ROUTN. ROUTN自举电容位
12	ROUTN	O	Negative pin for differential speaker amplifier output R. 右声道输出负端
13	LOUTN	O	Negative pin for differential speaker amplifier output L. 左声道输出负端
14	BSNL	BST	Connection point for the LOUTLN bootstrap capacitor, which is used to create a power supply for the high-side gate drive for LOUTN. LOUTN自举电容位
15	LOUTP	O	Positive pin for differential speaker amplifier output L. 左声道输出正端
16	BSPL	BST	Connection point for the LOUTP bootstrap capacitor, which is used to create a power supply for the high-side gate drive for LOUTP. LOUTP自举电容位
EP	GND	G	Provides both electrical and thermal connection from the device to the Board, make sure it is connected to the system ground. 既是地，又是散热PAD

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禾润电子科技（嘉兴）股份有限公司
Heroic Electronic Technology (Jiaxing) Co., Ltd.

地址：浙江省嘉兴市凌公塘路3339号JRC大厦A座三层

Add: A 3rd floor, JRC Building, No. 3339, LingGongTang Road, Jiaxing, Zhejiang Province

Sales: 0573-82585539, sales@heroic.com.cn

Support: 0573-82586151, support@heroic.com.cn

Fax: 0573-82585078

Website: www.heroic.com.cn; wap.heroic.com.cn

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