



TPA3116 D2 Digital Power amplifier board Model XH-M567

Product parameter

Product name :TPA3116D2 Power level
digital power amplifier board

Product model :XH-M567

Chip type :TPA3116D2

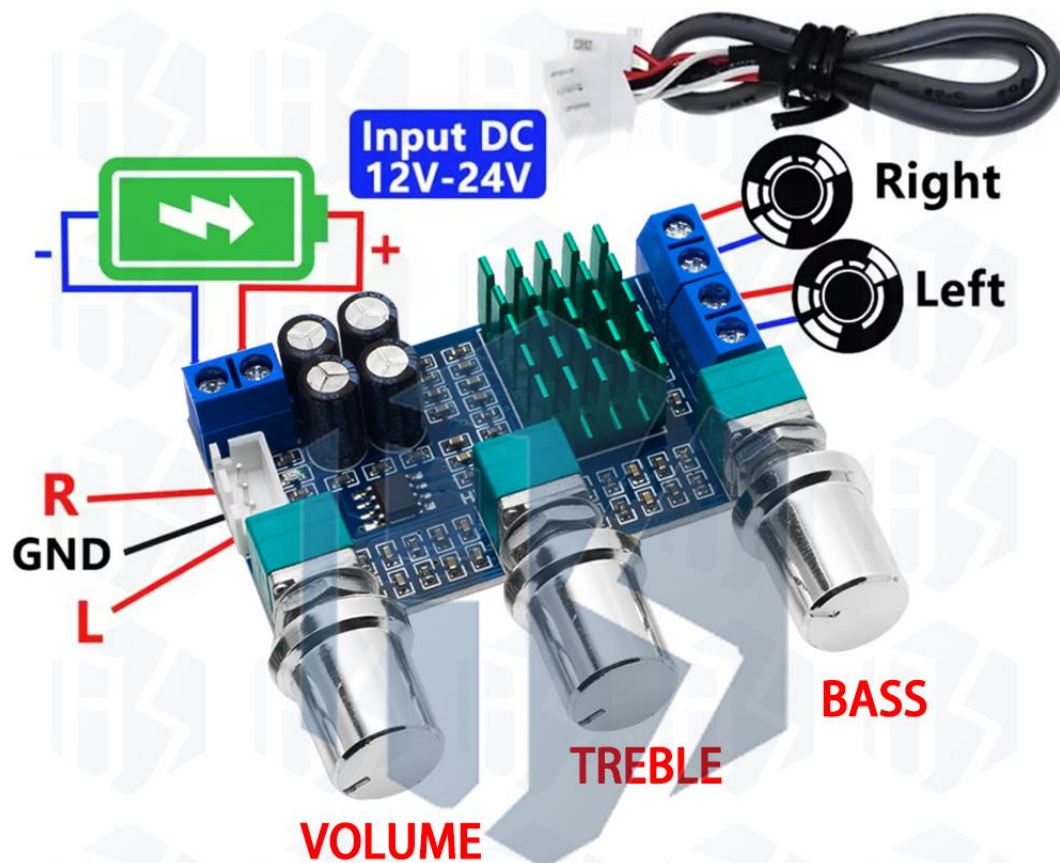
Chip protection: over voltage and under
voltage overheating DC detection of
short circuit

Supply voltage :DC12~24V

Output power :80Wx2

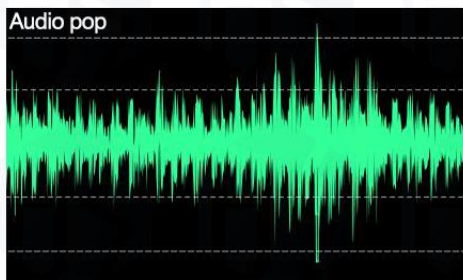
Power efficiency :> 90%

Number of channels: two-channel
output

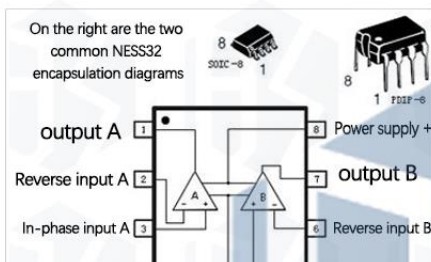


Product characteristics

High pitch clear bass powerful range



The range is wide and the quality is outstanding
 Pre-set N5532 low noise amplifier, N5532
 It is known as the king of sports. Obvious amplification effect
 Low distortion, with high power core
 TPA3116D2, mono power up to 80W,
 The range is wide and the tone is adjusted
 by high and low knobs
 Effect, can meet the needs of various



Introduction to NE5532

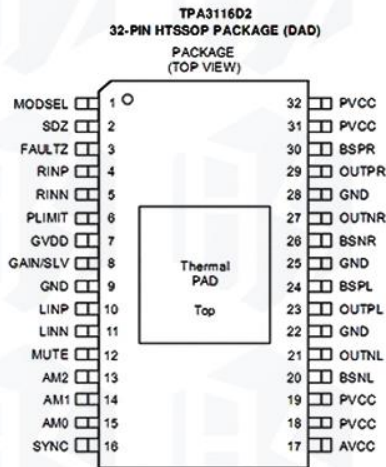
NE5532 is a high performance low noise dual operational amplifier (dual op-amp) integrated circuit. It is similar to many standard operational amplifiers, but it has better noise performance, excellent output driving capacity, quite high small signal bandwidth, large voltage range and so on. Therefore, it is suitable for use in high quality and professional audio equipment.



instruments, control circuits and telephone channel amplifiers. When used for audio amplification, the sound color is warm and the fidelity is high. It was praised as the "emperor of operational amplifier" by the audiophile in the early 1990s, and is still one of the necessary operational amplifier in the hands of many audiophile

Note: NE5532 and N5532 belong to the same product, and the difference in numbers represents the difference in origin.

Through the front-end amplification system -NE5532 low noise and high resolution amplification signal, and then through the TPA3116D2 core for power level amplification, audio signal through the dual high analytic amplification system, to create a high-power amplifier board



TPA3116D2 Chip pin circuit diagram

TPA3116D2 Chip characteristics

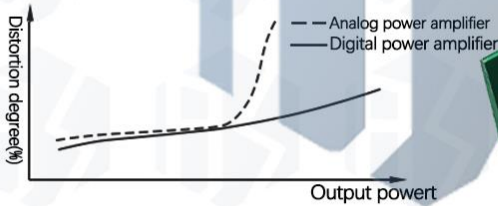
Wide voltage range: 12V to 26V
 Efficient D class operation, both > 90% power efficiency with low idle loss Consumption characteristics, advanced modulation system configuration, multiple switching frequencies, AM interference prevent
 The TPA3116D2 advanced oscillator /PLL circuit uses multiple switching frequencies
 Option to suppress AM interference; When using the master-slave mode option, also Multiple devices can be synchronized
 The TPA3116D2 device is designed for short circuit, overheat, overvoltage, undervoltage, and straight
 Flow and other failures provide comprehensive protection. Under overload conditions, the device will Report the failure to the processor to prevent itself from being corrupted

High efficiency digital amplifiers are different because of the numbers

TPA3116D2 chip is a digital power amplifier chip with power efficiency higher than 90%, low idle loss, and very small calorific value

Advantages of digital power amplifier

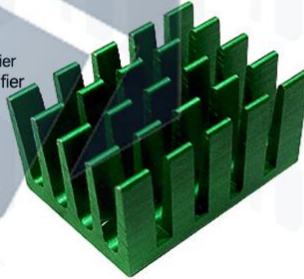
The analog power amplifier circuit is divided into class A, Class B or Class AB power amplifier circuit, which works normally. When the power amplifier tube works in the linear region; When overload, power amplifier tube work in the saturated area, out Now harmonic distortion, distortion degree increases exponentially, sound quality deteriorates rapidly. And the number Power amplifier in the power amplification has been in the saturation zone and cut-off zone, as long as the power amplifier tube is not damaged Bad, distortion will not increase rapidly



Comparison of distortion degree between digital power amplifier plate and ordinary power amplifier plate

Array radiator

The heat emitted by the chip passes through the staggered channels from the center, forming a convection heat dissipation effect, and the heat dissipation efficiency is higher



1.6mm thick double-layer circuit board, RF-4 dense glass fiber material, smooth surface, high mechanical strength, heat and moisture resistance, cross section is not easy to crack, has high dielectric properties, good sound quality will be outstanding. Circuit board layout beautiful, selected components, using numerical control patch process, each plug-in is professional hand welding, double-layer circuit board back only a small number of plug-in solder points

High-power usage scenario



活动广场

双80W立体声大功率功放，满足广场大范围使用高低音可调节，让音效随心所欲掌控，是你的“小苹果”

Dual 80W stereo power amplifier, satisfy the wide range of use. The high bass tunable, allowing the sound to be controlled at will, is yours. "The small apple"

产品图片

PRODUCT PICTURE

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Weight:41.61g