

PARAMETERS

Product name: TPA3116D2 power level digital amplifier board

Product model: XH-M567

Chip type: TPA3116D2

Chip protection: Overvoltage, undervoltage, overheat, DC short circuit detection

Supply voltage: DC12~24V

Output power: 80W*2

Power efficiency: > 90%

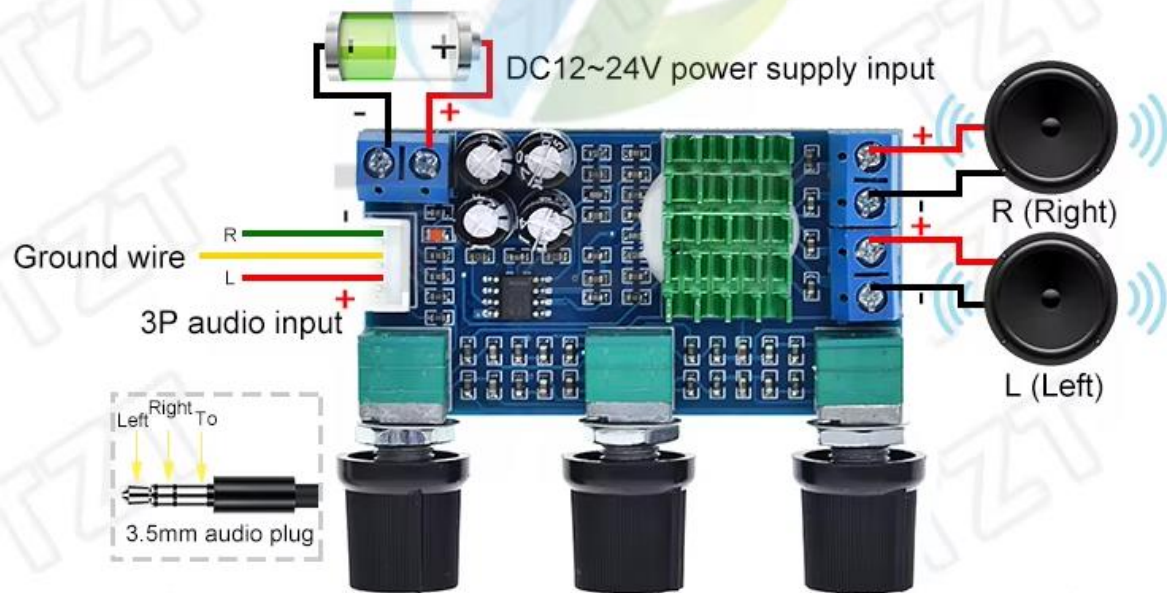
Number of channels: Dual channel output

Product size: 60*32*14mm

Net weight: About 34.8g

WIRING GRAPHIC

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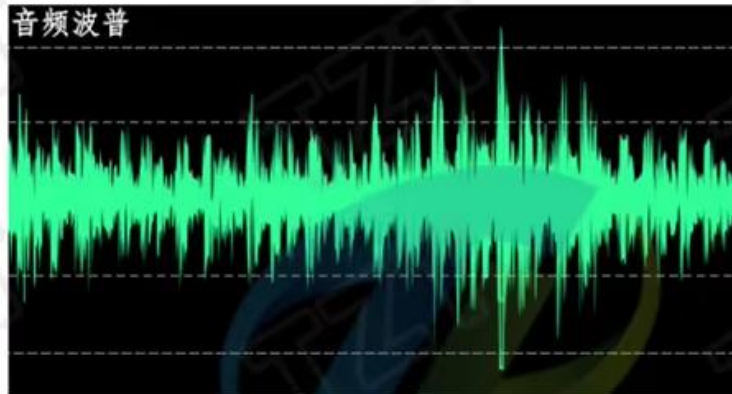
Warm prompt: red line is positive, black line is negative, do not connect the negative power source. Do not use the power supply and the power is too small stereo.

PRODUCT FEATURES

Wide vocal range and outstanding sound quality

Preset pre - stage N5532 low - noise amplifier,N5532 has the king of op - amp.

The amplification effect is obvious and the distortion is low. With the core high-power amplifier chip TPA3116D2, the mono power can reach 80W and the sound range is wide. The sound effects can be adjusted through the high-bass knob to meet the needs of various scenes for sound effects.



TPA3116D2 CHIP FEATURES

Wide voltage range: 12V to 26V

Efficient Class D operation, with >

90% power efficiency with low idle

loss features, advanced modulation

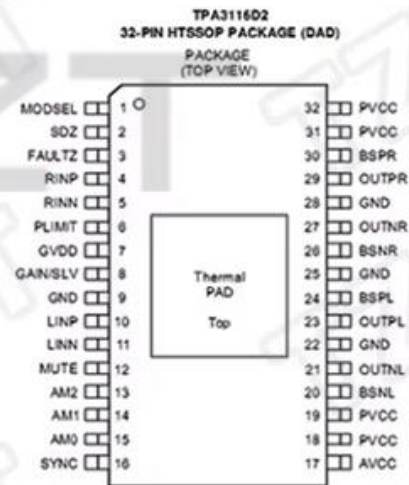
system configuration, multiple

switching frequencies, AM

interference prevention

The TPA3116D2 advanced oscillator /PLL circuit uses multiple switching frequency options to suppress AM interference. When used in combination with the master-slave mode options, multiple devices can be synchronized

The TPA3116D2 device provides comprehensive protection against short-circuit, overheating, overvoltage, undervoltage and DC faults. In the event of an over load, the device will report the failure to the processor, thus preventing itself from being damaged.



[High efficiency digital amplifiers are different because of their numbers]

TPA3116D2 chip is a digital power amplifier chip, power efficiency is higher than 90%, low idle loss characteristics, so the heat is very small.

DIGITAL POWER ANPLIFIER ADVANTAGES

Analog power amplifier circuit is divided into class A, class B or class AB power amplifier circuit, normal operation of the power amplifier work in the linear region; When overloaded, the amplifier works in the saturated region, and the harmonic distortion occurs. The degree of distortion increases exponentially, and the sound quality deteriorates rapidly. And the digital power amplifier in the power armplifier has been in the saturated area and cutoff area, as long as the power amplifier tube is not damaged, the distortion will not increase rapidly.

