## PAM8403 with switch potentiometer module

### Class D 2x3w

# **5V Digital Power Amplifier Board**

# **Product Description**

PAM8403 is a small digital power amplifier chip with high-definition sound quality. The circuit is easy to configure while the power supply filter is upgraded to 470uf. The PCB is a 1.6mm glass fiber board.

The power amplifier board outputs 3W+3W high-fidelity sound, great for power amplifier enthusiasts. The potentiometer adopts a sleek body which has a life span that can reach 15 years.

The filter-less architecture allows the device to drive the speaker directly, requiring no low-pass output filters, saving system cost and PCB area.

Product name: PAM8403 digital power amplifier board

Specification model: XTW8403 Power supply range: 5v DC

Output: 3W\*2

Appearance size: 29.5\*20.2\*15mm (excluding the protruding potentiometer rod)

#### Detailed Specs:

Operating voltage: 2.5V-5.5V

Maximum output power: 3W x 2 (5V 4Ω)

• Dimensions: 29.5mm x 20.2mm (35.2mm with potentiometer) x 13mm

#### IC Discussion:

The PAM8403 is a 3W, class-D audio amplifier. It offers low THD+N, allowing it to achieve high-quality sound reproduction. The new filterless architecture allows the device to drive the speaker directly, requiring no low-pass output filters, thus saving system cost and PCB area. With the same numbers of external components, the efficiency of the PAM8403 is much better than that of Class-AB cousins. It can extend the battery life, which makes it well-suited for portable applications. The PAM8403 is available in SOP-16 package.

# Features:

- 3W Output at 10% THD with a  $4\Omega$  Load and 5V Power Supply
- Filterless, Low Quiescent Current and Low EMI
- Low THD+N Superior Low Noise
- Efficiency up to 90%
- Short Circuit Protection
- Thermal Shutdown
- Few External Components to Save the Space and Cost
- Pb-Free Package

# **Product Diagram:**

