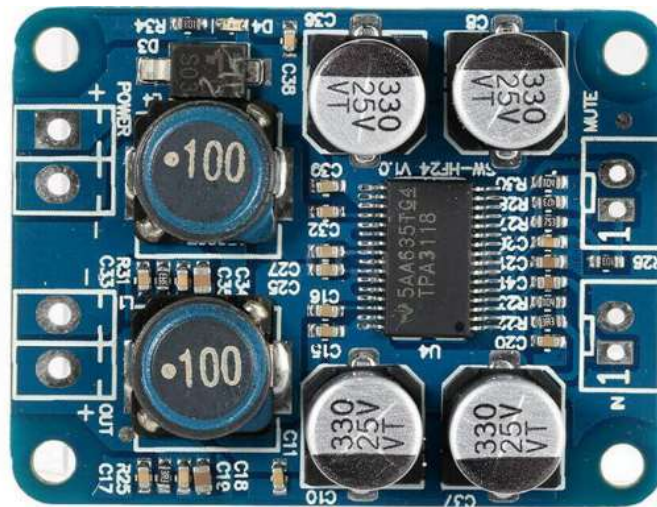


TPA3118 Mono Digital Audio Amplifier Module



Introduction

TPA3118 Mono Digital Audio Amplifier Module is a 60W single channel digital audio amplifier, which is based on the TPA3118 half-bridge and full-bridge audio amplifier chip. The TPA31xx series is a Class-D amplifier family without any filter circuit and AM, which has high efficiency of 90% with low power consumption. Due to low power dissipation, this series can be used without external heatsink under half load (60W/8Ω on the dual-layer PCBs) or with a small heatsink at a full load. The TPA3118 can operate as 2×30-W into an 8-Ω BTL Load at 24V supplying voltage (full load condition) or 1 × 60W in a mono full-bridge application (RL = 8 Ω) that is used as a mono amplifier in this amplifier board. This chip equipped with an internal protection circuit to protect it against short-circuit faults, over-voltage faults, under-voltage faults, DC input, and thermal faults (overheating).

This board can run one 4 ohms speaker or one 8ohms, which 8ohms speaker is the best selection to achieve continuous 60W output power. This module can be supplied with a wide range of 8V up to 26V that 24V with 2.5A is recommended. This amplifier board has 8 solder pad, 2 for supplying wires, 2 for connecting the speaker and 2 for feeding audio inputs, and 2 for jumpering to mute the output sound.

This tiny amplifier features powerful sound, high-quality sound, without POP noise, small to squeak, and large to cannon sound, that specially developed for applying in-home appliance and Portable Audio, such as flat panel television, flat-panel monitor, multimedia systems, wireless speakers, mini and microsystems, and home sound sets.

Specification

Working Voltage: 8~24V DC

Output Power : 60W Max

Output Audio: Mono

Applicable Speaker Impedance: 4~8 ohm

PCB Board Size: 45 x 35mm