

## GENERAL DESCRIPTION

The ft6203 is a mono fully differential audio amplifier designed to drive a speaker with  $8\Omega$  impedance while consuming minimum PCB area. The ft6203 operates from 2.5V to 5.5V, drawing only 1.9mA of quiescent current. It is available in DFN3X3-8L and MSOP-8L packages.

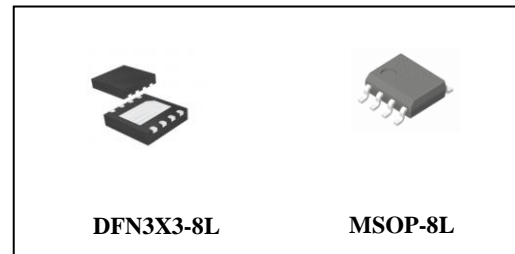
The ft6203 provides multiple features including 87dB PSRR from 90Hz to 5kHz, improved RF-rectification immunity, and a minimum number of external components required, which altogether make it ideal for mobile phones, PDAs, and other portable devices applications.

## APPLICATIONS

- Mobile Phone
- Mini Sound Box
- PDA
- Portable electronic devices

## FEATURES

- Output power: 1.25W ( $8\Omega$ , 5V, 1% THD+N)
- Fully differential input to reduce RF rectification
- PSRR: 87dB (typical) at 217Hz
- THD+N: 0.06% at 1kHz (1W)
- Wide supply voltage range: 2.5V to 5.5V
- Quiescent current: 1.9mA
- Shutdown current: 0.1 $\mu$ A (typical)
- Available packages: DFN3X3-8L and MSOP-8L



## APPLICATION CIRCUIT

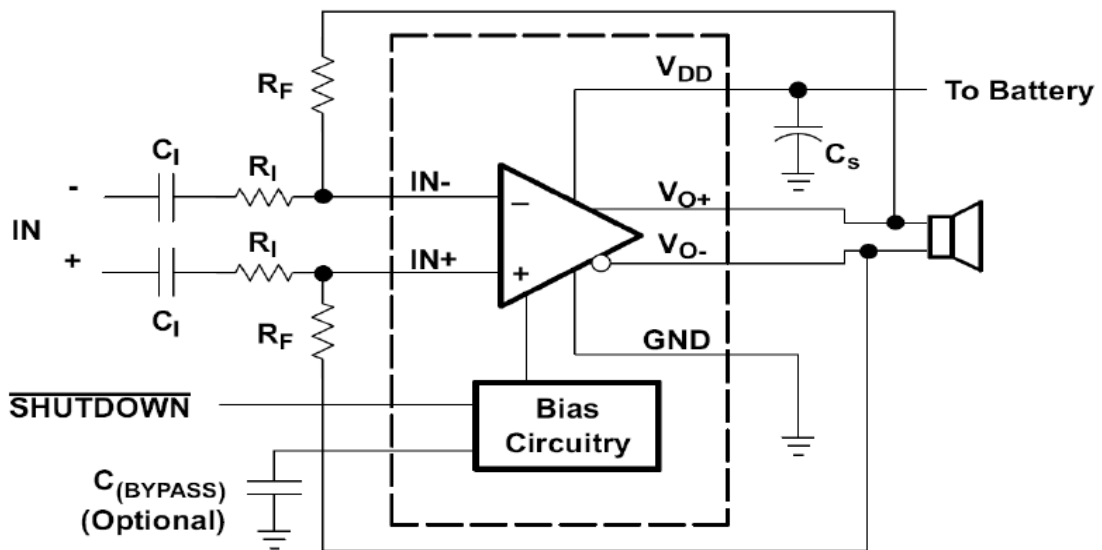
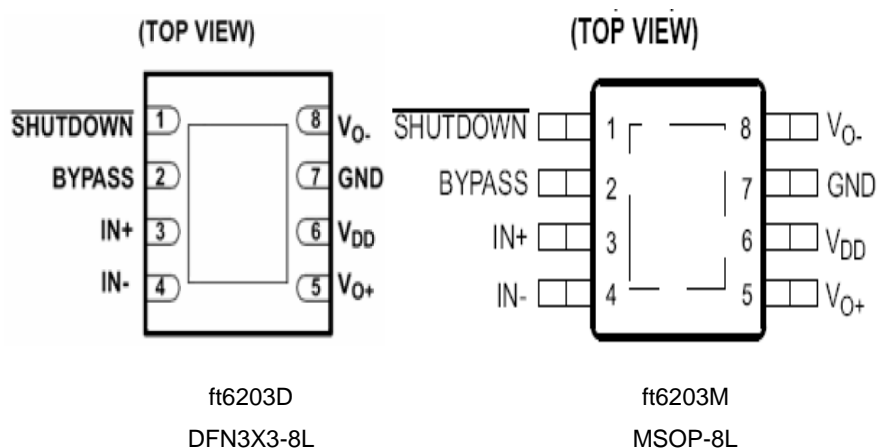


Figure 1: Typical Audio Amplifier Application Circuit

## PIN CONFIGURATION AND DESCRIPTION



SYMBOL	DFN3X3-8L	MSOP-8L	DESCRIPTION
BYPASS	2	2	Mid-supply voltage. Adding a bypass capacitor improves PSRR.
GND	7	7	Ground
IN-	4	4	Negative differential input
IN+	3	3	Positive differential input
SHUTDOWN	1	1	Shutdown terminal (active low logic)
V <sub>DD</sub>	6	6	Power Supply
V <sub>O+</sub>	5	5	Positive BTL output
V <sub>O-</sub>	8	8	Negative BTL output
Thermal Pad			Connect to ground. Thermal pad must be soldered down in all applications to properly secure device on the PCB.

## ORDERING INFORMATION

PART NUMBER	TEMPERATURE RANGE	PACKAGE
ft6203D	-40°C to +85°C	DFN3X3-8L
ft6203M	-40°C to +85°C	MSOP-8L