

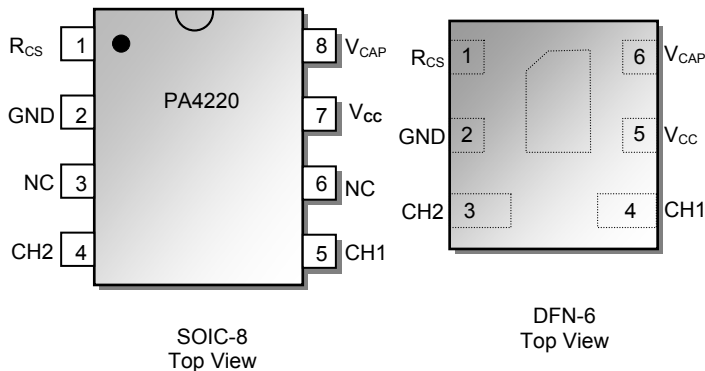
**FEATURES**

- Extremely Low supply current (<1µA).
- Shunt operation hence distortion free.
- Instantaneous. Power-up and Power-down muting.
- No external microcontroller and Signal needed.
- ESD protected outputs.
- 1.5V to 5V supply operation.
- Handle up to 3.5V RMS signal.
- Compact 2 x 2 x 0.8mm 6L DFN.
- Standard SO-8 packages.

**APPLICATIONS**

- Portable DVD players
- Set-top boxes
- Cell Phones
- Portable Media Players
- Digital Video Recorders

**Pin Layout and Description**



Pin# DFN-6	Pin # SOIC-8	Description	Notes
1	1	RCS	Power ON delay capacitor
2	2	GND	Ground
	3	NC	No Connect
3	4	Ch2	Channel 2 control signal
4	5	Ch1	Channel 1 control signal
	6	NC	No Connect
5	7	V <sub>CC</sub>	Voltage Supply Input
6	8	V <sub>CAP</sub>	Holding capacitor

**GENERAL DESCRIPTION**

PA4220 is a low power ( $I_{CC} < 1\mu A$ ) monolithic mixed signal device. Its function is to control the power supply transition noise in audio systems.

PA4220 boasts several features that make it a “one of a kind” product on the market. Most prominent is the feature is that it does not require any external signal to suppress “POPUP and SHUTDOWN” Noise.

PA4220 requires few external components for its operation, working from low to medium supply voltages of up to 5V. The ramp time of the supply should be greater than 50ms.

On power-up and power-down the output of the amplifier stage is switched to a convenient low impedance voltage rail hence muting the amplifiers, preventing the audible pop, which is normally heard in the headset or speakers.

PA4220 operates as a passive shunt device hence the designer does not have to worry about the device introducing any kind of noise or distortion into the system. It has extremely low current consumption (<1uA).

PA4220 is equipped with ESD (Human Body Model) protection circuitry on the outputs.

PA4220 is available as an 6L low profile 0.8mm DFN package and 8L SO-8 package.

Contact [sales@protekdevices.com](mailto:sales@protekdevices.com) for any additional information.

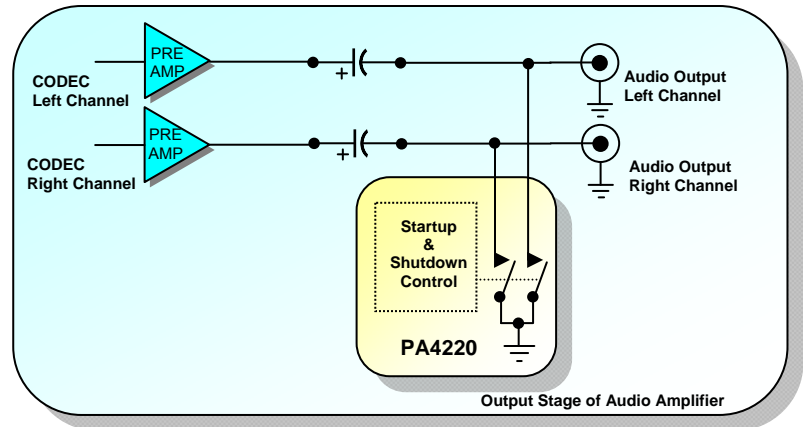


Figure 1: Functional block diagram of PA4220

**Ordering Information**

Temperature Range	Package	Part Number
-40 to 85 °C	SOIC-8	PA4220DQ-T7
	DFN-8	PA4220DN-T7