

# **Product Brief**

CP2293 V1.0

**Audio Power Amplifier Series** 

## 3W, Mono, Fully Differential Audio Power Amplifier

## www.datasheet General Description

The CP2293 is a fully differential audio power amplifier designed for demanding audio applications. It is capable of delivering 3 watt of continuous average power to a 3Ω BTL load with less than 10% distortion (THD+N) from a 5V battery voltage. It operates from 2.2V to 5.5V.

Features like -88dB PSRR at 217Hz, improved RF-rectification immunity, the space-saving CSP8, DFN8 and MSOP8 packages, the advanced pop & click circuitry, a minimal count of external components and low-power shutdown mode make the CP2293 ideal for wireless handsets.

The CP2293 is unity-gain stable, and the gain can be configured by external resistors.







#### **Features**

- Fully differential amplifier
- Improved PSRR at 217Hz
- Power output at 5.0V, 10% THD, 3  $\Omega$  (DFN8 only)
- Power output at 5.0V, 1% THD, 8  $\Omega$
- Ultra low shutdown current

1.3W (typ)  $0.01\mu A$  (typ)

3W (typ)

-88dB (typ)

- Improved pop & click circuitry eliminates noises during turn-on and turn-off transitions
- Thermal overload protection circuitry
- Unity-gain stable
- External gain configuration capability
- Available in space-saving packages: CSP8, DFN8 and MSOP8
- RoHS compliant and 100% lead(Pb)-free

## **Applications**

- Wireless handsets
- Portable audio devices
- **PDAs**
- Notebook computers



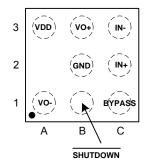
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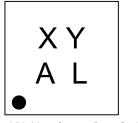
www.datasheet4u.com

## **Pin Configurations**

# CSP8 Package (Top View)

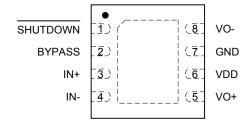


### **CSP8 Marking**



XY -Manufacture Date Code AL - CP2293ITLX

# DFN8 Package (Top View)

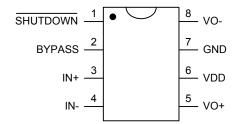


### **DFN8 Marking**

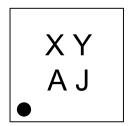


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### MSOP8 Package (Top View)



### **MSOP8 Marking**



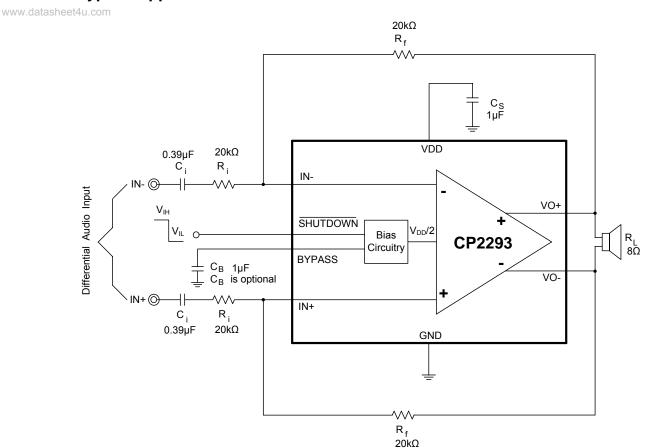
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### **Typical Application Circuit**



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