



BCT8937S

High Efficiency, Low Noise Class T Audio Amplifier

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GENERAL DESCRIPTION

BCT8937S is specifically designed to enhance smart mobile phone sound quality, which is an innovative high efficiency, low noise, ultra-low distortion, constant large volume, Class T audio amplifier, using our unique Digital Power Modulation(DPM) audio algorithm, effectively eliminate audio noise, increase signal Dynamic range which will greatly improve sound quality and volume. With an advance TOP power technology, efficiency reach 93%, and power amplifier's overall efficiency is up to 80%, greatly saves the mobile phone power consumption and prolong the mobile phone usage time. The BCT8937S noise floor is as low as to 53 μ V, with 97dB high signal-to-noise-ratio (SNR). The ultra-low distortion 0.08% and unique Digital Power Modulation technology brings high quality music enjoyment.

BCT8937S has 0.6W, 0.8W, 1.0W and 1.2W four selectable speaker-protection output power levels, which is suitable for different rated power speakers. With Digital Power Modulation Audio Algorithms, the music is pure nature and melodious. Within lithium battery voltage range (3.3V-4.35V), output power is constant, preventing the voice becomes smaller and smaller during usage of cell phone.

BCT8937S has built-in over current protection, over-temperature protection and short circuit protection function, effectively protecting the chip from damage.

The BCT8937S uses small 0.4mm pitch 1.58mmx1.63mm WCSP-14L package.

FEATURES

- Power amplifier overall efficiency 80%
- Low noise: 53 μ V
- Ultra-low distortion: 0.08%
- Digital Power Modulation (DPM) technology
- Selectable speaker-guard power level: 0.6w, 0.8W, 1.0W, 1.2W
- Within voltage range(3.30V~4.35V), output power is maintained constant
- One wire pulse control
- High PSRR: -68dB(217Hz)
- Support 6ohm speaker
- Excellent pop-click suppression
- ESD protection: \pm 6kV (HBM)
- Small 0.4mm pitch 1.58mmx1.63mm WCSP-14L package

APPLICATIONS

- Cellular Phones
- Portable Audio Devices
- Mini Speakers
- Tablets