



General Description

The SAH2642 bipolar-input headset driver achieves very low noise density with an ultra low distortion of 0.00002% at 1kHz. The SAH2642 offers rail-to-rail output swing to within 150mV of supply rails with a 2k Ω load, which increases headroom and maximizes dynamic range. The device also has a high output drive capability of ± 110 mA.

The device operates over a wide supply range of 3.6V to 36V or ± 1.8 V to ± 18 V, on only 4.1mA of supply current per amplifier. The SAH2642 is unity-gain stable and provides excellent dynamic behavior over a wide range of load conditions.

The SAH2642 is available in Green SOP-8 Package. It operates over an ambient temperature range of -40°C to $+85^{\circ}\text{C}$.

Features

- Superior Sound Quality
- Low Offset Voltage: $\pm 350\mu\text{V}$ (MAX)
- Ultra Low Noise: 1.6nV/ Hz at 1kHz
- Ultra Low Distortion: 0.00002% at 1kHz
- High Slew Rate: 16V/ μs
- Gain-Bandwidth Product: 16MHz (G = +1)
- High Open-Loop Gain: 140dB
- Unity-Gain Stable
- Low Quiescent Current: 4.1mA/Amplifier
- Rail-to-Rail Output
- Support Single or Dual Power Supplies: 3.6V to 36V or ± 1.8 V to ± 18 V
- Operating temperature: -40°C to $+85^{\circ}\text{C}$
- Available in Green SOP-8 Package

Package Marking and Ordering Information

| Part Number | Marking | Package | Units/Tube | Units/Reel |
|-------------|---------|---------|------------|------------|
| SAH2642 | SAH2642 | SOP8 | | 4000 |