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## DESCRIPTION

The SSI 34R3433 is a BiCMOS mono-lithic integrated circuit designed for use with two-terminal recording heads. It provides a low noise read amplifier, write current control, and data protection circuitry for up to four channels. Internal  $350\Omega$  damping resistors are switched in during write mode and switched out during read mode. Power supply fault protection is provided by disabling the write current generator during power sequencing. System write to read recovery time is significantly improved by making the read channel outputs high impedance during write mode.

The SSI 34R3433 requires a single 3 to 5.5 V power supply.

## FEATURES

- **+3 V - 5.5 V voltage supply**
- **Low power**
  - PD = 73 mW read mode (Nom) (@ 3.3 V supply)
  - PD = 75  $\mu$ W Idle (Max @ Vcc = 3.3 V)
- **High Performance:**
  - Read mode gain = 300 V/V
  - Input noise = 0.5 nV/ $\sqrt{\text{Hz}}$  (Nom)
  - Input capacitance = 9 pF (Nom)
  - Write current range = 2-30 mA
- **Power supply fault protection**

## BLOCK DIAGRAM

