

### 3.56 Texas Instruments RC4580

|                           |                                     |
|---------------------------|-------------------------------------|
| <b>Number of Channels</b> | 2                                   |
| <b>Packages</b>           | DIP, SOIC                           |
| <b>Cost per Amplifier</b> | 0.21 US\$ at 1k units (August 2008) |

| Parameter                                         | Minimum  | Typical    | Maximum  | Unit       |
|---------------------------------------------------|----------|------------|----------|------------|
| Input Offset Voltage                              |          | 0.5        | 3        | mV         |
| Input Bias Current                                |          | 100        | 500      | nA         |
| Input Offset Current                              |          | 5          | 200      | nA         |
| Gain Bandwidth Product                            |          | 12         |          | MHz        |
| Slew-Rate                                         |          | 5          |          | V/ $\mu$ S |
| Input Common-Mode Voltage Range                   | $\pm 12$ | $\pm 13.5$ |          | V          |
| Output Voltage Swing ( $R_L = 2\text{ k}\Omega$ ) | $\pm 12$ | $\pm 13.5$ |          | V          |
| Power Supply Voltage                              | $\pm 2$  |            | $\pm 18$ | V          |
| Quiescent Current per Amplifier                   |          | 3          | 4.5      | mA         |

Table 3.53: Specifications for  $T_A = 25^\circ\text{C}$  and  $V_S = \pm 15\text{ V}$ .

A bipolar amplifier using a two-stage architecture—according to the manufacturer’s datasheet specifically optimised for audio applications. Note the sparse specifications, even lacking a detailed noise specification.

All tests indicate modest performance; there are better opamps available at the same or even lower cost.







