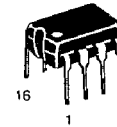


MC34119

Low Power Audio Amplifier
Silicon Monolithic Integrated Circuit

The MC34119 is a low power audio amplifier integrated circuit intended (primarily) for telephone applications, such as in speakerphones. It provides differential speaker outputs to maximize output swing at low supply voltages (2.0 volts minimum). Coupling capacitors to the speaker are not required. Open loop gain is 80 dB, and the closed loop gain is set with two external resistors. A Chip Disable pin permits powering down and/or muting the input signal. The MC34119 is available in a standard 8-pin DIP or a surface mount package.

- Wide Operating Supply Voltage Range (2 – 16 Volts) — Allows Telephone Line Powered Applications
- Low Quiescent Supply Current (2.7 mA Typical) for Battery Powered Applications
- Chip Disable Input to Power Down the IC
- Low Power-Down Quiescent Current (65 μ A Typical)
- Drives a Wide Range of Speaker Loads (8 Ohms and Up)
- Output Power Exceeds 250 mW with 32 Ohm Speaker
- Low Total Harmonic Distortion (0.5% Typical)
- Gain Adjustable from < 0 dB to > 46 dB for Voice Band
- Requires Few External Components



P SUFFIX
PLASTIC DIP
CASE 626

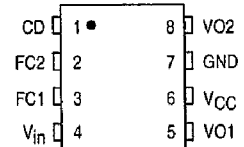


D SUFFIX
SOIC PACKAGE
CASE 751

ORDERING INFORMATION

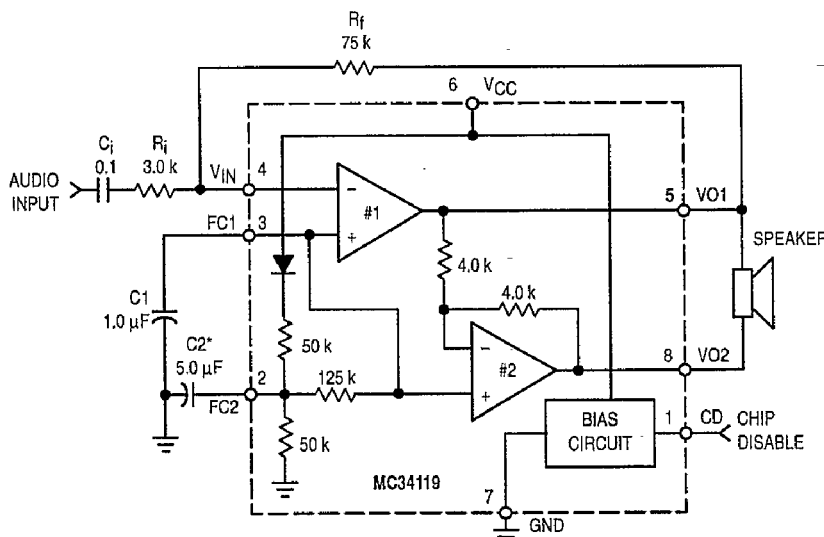
MC34119P	Plastic DIP
MC34119D	Plastic SOIC

PIN ASSIGNMENT



(TOP VIEW)

BLOCK DIAGRAM AND TYPICAL APPLICATION CIRCUIT



* = OPTIONAL
DIFFERENTIAL GAIN = $2 \times \frac{R_f}{R_i}$

REV
9/95

MC34119
2-536

MOTOROLA