



# MOTOROLA

## Product Preview

# Low voltage compander

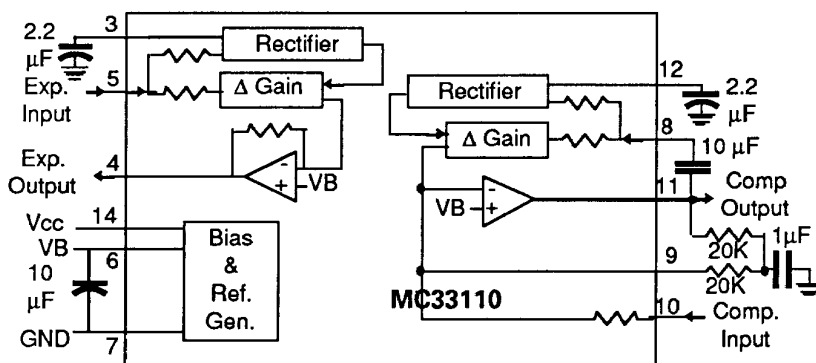
The MC33110 contains two variable gain circuits configured for compressing and expanding the dynamic range of an audio signal. Channel 1 is configured as an expander, while channel 2 can be configured as a compressor or expander. Each channel has a full wave rectifier to provide average value information to a variable gain cell located in either the input stage or the feedback path. An internal bandgap temperature stable reference provides the necessary precision voltages and currents required.

The MC33110 will operate from a supply voltage of 2 to 7 volts, and over a temperature range of -40 to +85°C. It is designed to accommodate an 80dB dynamic range - from -60dB to +20dB referenced to 100mVrms.

Applications include cordless telephones, CBs, walkie-talkies, and most voice RF links, and any application where the signal-to-noise ratio can be improved by reducing the transmitted dynamic range. The MC33110 will be available in a 14 pin plastic DIP and SOIC packages.

- Operating supply voltage: 2 to 7 volts
- 80dB dynamic range compressed to 40dB.
- Unity gain level set at 100mV rms.
- Response time adjustable.
- Ambient Operating temperature: -40 to +85°C.
- Temperature compensated reference.

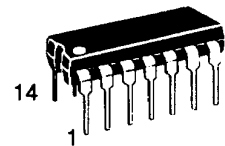
### BLOCK DIAGRAM



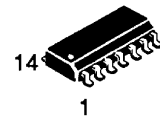
## MC33110

### LOW VOLTAGE COMPANDER

### SILICON MONOLITHIC INTEGRATED CIRCUIT



P suffix  
Plastic package  
Case 646



D suffix  
Plastic surface mount  
Case 751A

### PIN CONNECTIONS (TOP VIEW)

