



# MOTOROLA

## Specifications and Applications Information

### VOICE SWITCHED SPEAKERPHONE CIRCUIT

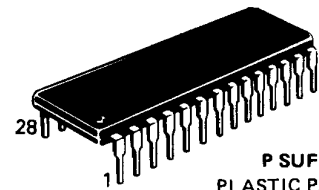
The MC34018 Speakerphone integrated circuit incorporates the necessary amplifiers, attenuators, and control functions to produce a high quality hands-free speakerphone system. Included are a microphone amplifier, a power audio amplifier for the speaker, transmit and receive attenuators, a monitoring system for background sound level, and an attenuation control system which responds to the relative transmit and receive levels as well as the background level. Also included are all necessary regulated voltages for both internal and external circuitry, allowing line-powered operation (no additional power supplies required). A Chip Select pin allows the chip to be powered down when not in use. A volume control function may be implemented with an external potentiometer. MC34018 applications include speakerphones for household and business use, intercom systems, automotive telephones, and others.

- All necessary level detection and attenuation controls for a hands-free telephone in a single integrated circuit
- Background noise level monitoring with long time constant
- Wide operating dynamic range through signal compression
- On-chip supply and reference voltage regulation
- Typical 100 mW output power (into 25 Ohms) with peak limiting to minimize distortion
- Chip Select pin for active/standby operation
- Linear Volume Control Function
- Standard 28-pin plastic DIP package (0.600 inch wide) and PLCC package

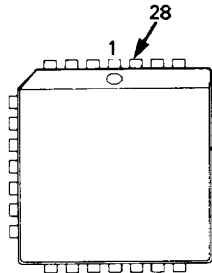
## MC34018

### VOICE SWITCHED SPEAKERPHONE CIRCUIT

### SILICON MONOLITHIC INTEGRATED CIRCUIT



P SUFFIX  
PLASTIC PACKAGE  
CASE 710-02



FN SUFFIX  
PLCC-28  
CASE 776-01

### BLOCK DIAGRAM

