



FIG. 9.8 Basic circuit diagram of a series-transistor-regulated current supply. Current through the load is controlled by a high-current transistor in series with the measuring current. A differential amplifier regulates the current passing through the power transistor by comparing two voltages: (1) the signal from a controlling ramp generator, and (2) the feedback signal from a precision resistor in series with the sample current. Feedback resistors are added across the operational amplifier to prevent oscillations at higher frequencies.