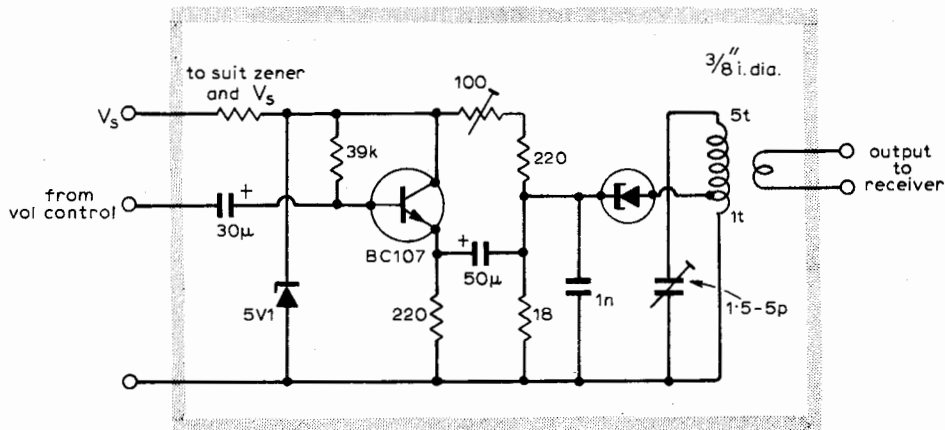


Improving television sound

Most of the distortion in television sound is introduced in the power amplifier and loudspeaker. Coupling the low-level sound signal, available at the detector or soon after, to a hi-fi system is an attractive solution to the problem, but usually founders on the requirement for a large and expensive transformer to isolate the television receiver chassis from the mains neutral. This system dispenses with this requirement.

The tunnel diode oscillator operates at a frequency within the f.m. broadcast band, at a level of a milliwatt or so, and is frequency modulated by the transistor, whose signal is derived from the volume control of the tv set. The oscillator output is inductively coupled to a coaxial line by



an air-cored transformer which provides ample power-frequency isolation. At the hi-fi system, the resulting f.m. signal can be capacitatively coupled into the aerial circuit of an f.m. radio. By suitable

screening, unwanted f.m. radiation can be kept to an insignificant level.

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