The ONKYO "Real Phase" Amplifier Story

Overview

In conventional amplifiers, the power supply and amplifier stage have been designed with a simple resistive load of fixed impedance, quite unlike the reactive load actually provided by high fidelity loudspeakers.

Recently, some amplifiers have been designed to operate into a wider range of load impedances, as the actual impedance of a loudspeaker varies with frequency. However, the power supply design of these amplifiers still treats the loudspeaker load in a simple resistive fashion.

The IHF A-202 reactive loudspeaker load model, shown in Fig. 1, consists of a circuit configuration designed to simulate the reactive load normally found in today's loudspeakers. The graph in Fig. 1 shows the impedance variation with frequency caused the IHF A-202 reactive loudspeaker load, with an impedance peak of 23.7 ohms at 50.3 Hz.

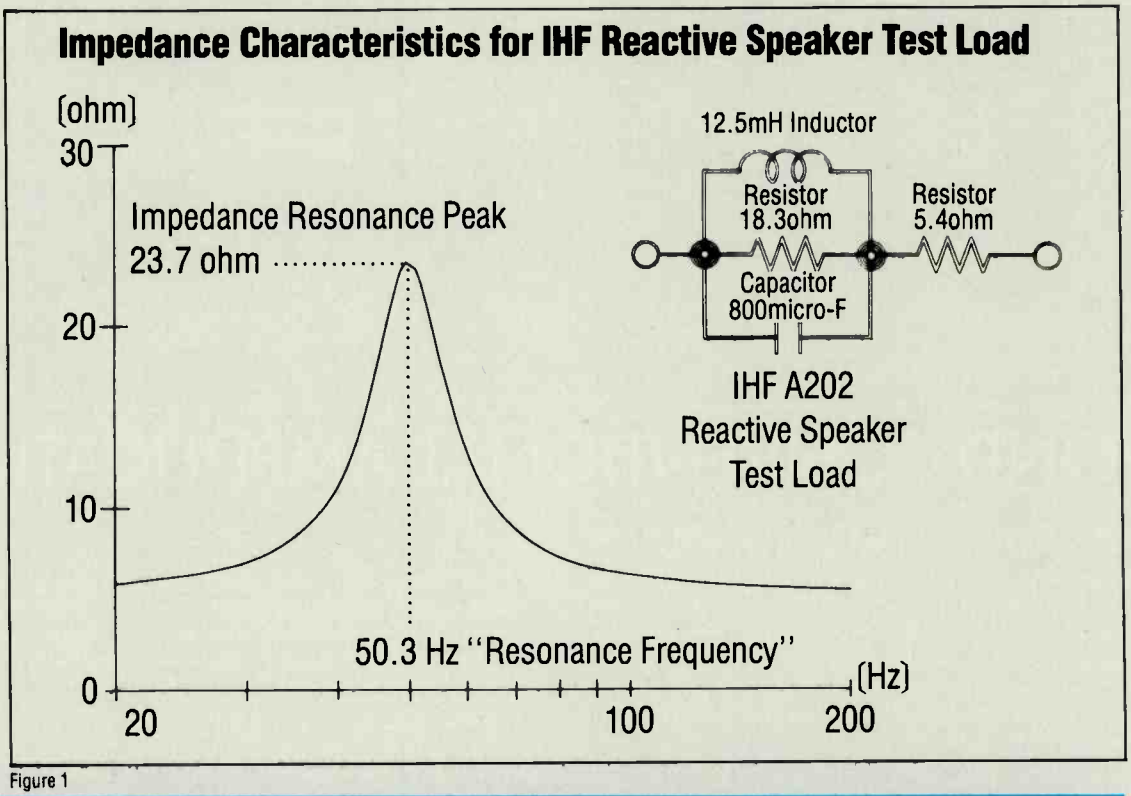

Figure 1