Resonators "loop-slot" for pulse ESR spectrometers of 3 cm range

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Abstract

Constructions of two-loop "loop-slot"-type resonators for pulse electron paramagnetic resonance spectrometers of 3 cm range are described. The resonators are characterized by 1 GHz frequency tuning and controlled connection with waveguide line. Microwave power which is necessary for optimum echo attainment at the usage of these resonators is shown to be by 10 db less than in a case of usual rectangular resonator.