

Abstracts

Ferrite Resonance Isolators Using Tapered DC Magnetic Fields

F.S. Chen. "Ferrite Resonance Isolators Using Tapered DC Magnetic Fields." 1962 Transactions on Microwave Theory and Techniques 10.6 (Nov. 1962 [T-MTT]): 579-584.

Tapered dc magnetic fields can be used to broad-band ferrite resonance isolators of the rectangular waveguide type. In this work a ferrite slab of narrow resonance line width was employed in order to keep the ratio of reverse-to-forward attenuation large while the bandwidth of the isolator was broadened by means of an appropriately tapered magnetic field. A ratio of reverse-to-forward attenuation of more than 60 has been obtained experimentally over a 38 per cent frequency range at X band, and further improvement of these figures seems possible.

 [Return to main document.](#)