

“Transmission in rectangular waveguides periodically loaded with SRRs: simulation and measurement”, pp.66-70

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Abstract – This paper revisits the topic of transmission in cut-off rectangular waveguides periodically loaded in the E-plane with Split-Ring Resonators (SRR), to present some new results and interpretations: it is shown that along with the known band-pass region where the SRRs behave as a negative magnetic permeability medium (NMPM), another band-pass region with very good insertion loss can exist that could be explored for the design of compact waveguide sharp filters. The analysis is based on method of moment simulations using WIPL-D, and the results are validated with measurements.