

## Non-Reciprocal Remanence Phase Phase Shifters in H-Guide

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*E. Stern. "Non-Reciprocal Remanence Phase Phase Shifters in H-Guide." 1967 G-MTT International Microwave Symposium Program and Digest 67.1 (1967 [MWSYM]): 115-116.*

Considerable attention is being given to the development of miniature microwave components for phased array applications. The H-guide configuration shown schematically in Fig. 1 and in cross-section in Fig. 2 can be miniaturized readily by employing a dielectric rib with a high dielectric constant and by closing the magnetic flux path outside the microwave region with a composite magnetic circuit. By contrast, waveguide remanence phase shifters cannot be miniaturized as readily because a reduction of width increases the frequency sensitivity, and a reduction of height produces a loss of phase shift as a result of the corner effects.

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