

Abstracts

Magnetostriction Effects in Remanence Phase Shifters (Correspondence)

E. Stern and D.H. Temme. "Magnetostriction Effects in Remanence Phase Shifters (Correspondence)." 1965 Transactions on Microwave Theory and Techniques 13.6 (Nov. 1965 [T-MTT]): 873-874.

One type of remanence phase shifter consists of a microwave ferrite toroid located in a waveguide. Close mechanical fit between ferrite and waveguide is desirable to eliminate reflection spikes, and to provide an adequate thermal path. Such structures typically develop mechanical pressure on the ferrite, and this pressure may vary with temperature, due to the unequal expansion of the waveguide and ferrite with temperature.

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