Abstracts

Low-Temperature Microwave Power Limiter (Correspondence)

F.J. Sansalone and E.G. Spencer. "Low-Temperature Microwave Power Limiter (Correspondence)." 1961 Transactions on Microwave Theory and Techniques 9.3 (May 1961 [T-MTT]): 272-273.

A passive microwave power limiter, using the nonlinear properties of ferromagnetic resonance in yttrium-iron-garnet (YIG) has been evaluated at 4.2° K, 77° K, and 297° K. The limiter, of the DeGrasse type, consists of two decoupled, half-wavelength coaxial cavities as shown schematically in Fig. 1. Input and output coupling is made through the use of quarter-wavelength matching transformers. An optically polished sphere of single crystal YIG is placed in the position of maximum RF magnetic fields common to both cavities.

❑ Return to main document.