

Abstracts

Computer - Aided Design and Optimisation of Broadband Stripline Circulators for 18-30 GHz and 18-40 GHz

M.T. Hickson, L.E. Davis, D.K. Paul and D.B. Sillers. "Computer - Aided Design and Optimisation of Broadband Stripline Circulators for 18-30 GHz and 18-40 GHz." 1991 MTT-S International Microwave Symposium Digest 91.3 (1991 Vol. III [MWSYM]): 961-964.

Computer programs have been written for the design and optimisation of tracking stripline circulators, and used to predict the performance of broadband designs, 18 - 30 GHz and 18 - 40 GHz, using ferrites with $4\pi M/\text{sub s/ /spl ap/ } 5000\text{G}$. Initial results show promising agreement between predicted and experimental performance and an undesirable insertion-loss spike has been identified as due to an inherent mismatch associated with circulator modes. The design and location of matching transformers are discussed, and the programs can be used with a commercial design software.

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