Abstracts

Design Consideration for High-Isolation Coaxial Broad-Band p-i-n Diode Switches and Limiters (Short Papers)

B.K. Sarkar. "Design Consideration for High-Isolation Coaxial Broad-Band p-i-n Diode Switches and Limiters (Short Papers)." 1983 Transactions on Microwave Theory and Techniques 31.9 (Sep. 1983, Part I [T-MTT]): 776-777.

Broad-band coaxial p-i-n diode switches and limiters are realized using a low-pass filter structure in which shunt capacitances are realized by the capacitances of reverse- or zero-biased p-i-n diodes. Usually, the design considerations are given only for insertion-loss state. No design guideline exists in the literature to optimize isolation for these type of switches and limiters. This paper shows that using low-pass filter structure with series inductance as the first element, higher isolation without increasing insertion loss can be achieved.

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