Abstracts

Planar Noncontacting Short Circuits for Millimeter-Wave and Submillimeter-Wave Applications

T. Newman and K.T. Ng. "Planar Noncontacting Short Circuits for Millimeter-Wave and Submillimeter-Wave Applications." 1992 Microwave and Guided Wave Letters 2.10 (Oct. 1992 [MGWL]): 412-414.

Adjustable planar noncontacting short circuits for both rectangular and circular waveguides have been designed and tested. The planar configuration allows these short circuits to be fabricated photolithographically, therefore reducing fabrication cost and eliminating the machining tolerance requirements of conventional noncontacting short circuits. Scale model tests show that the new short circuits can offer a return loss < 0.1 dB and linear phase variation over a single mode bandwidth. Successful application of a planar short circuit in a 300-365 GHz mixer further demonstrates the usefulness of these short circuits at high frequency.

❑ Return to main document.