Abstracts

A New Structure of Microwave Ultrawide-Band Differential Phase Shifter

V.P. Meschanov, I.V. Metelnikova, V.D. Tupikin and G.G. Chumaevskaya. "A New Structure of Microwave Ultrawide-Band Differential Phase Shifter." 1994 Transactions on Microwave Theory and Techniques 42.5 (May 1994 [T-MTT]): 762-765.

A new structure for TEM transmission line ultrawide-band differential phase shifters is proposed. This consists of a cascade of two-ports, each of which is a single coupled section with parallel transmission lines connected to each other at one end. The section lengths and coupling coefficients are different. The results of numerical synthesis have been tabulated for phase shifters of 90 degrees differential phase shift. The proposed structure has the advantage of a lower coupling coefficient and improved phase-frequency characteristic in comparison with the other stepped phase shifters.

❑ Return to main document.