

Abstracts

Low cost ferrite toroid phase shifter for broadband applications

E.-B. El-Sharawy, S. Gaglione and D. Partlow. "Low cost ferrite toroid phase shifter for broadband applications." 1999 MTT-S International Microwave Symposium Digest 99.3 (1999 Vol. III [MWSYM]): 1157-1160 vol.3.

This paper presents analysis and modeling of a novel single toroid phase shifter. This phase shifter exhibits large phase shift and broadband frequency characteristics of up to 3:1. The single toroid can be fabricated using a low cost green tape process which can be fired at low temperature. A coplanar strip line is cofired inside the toroid to allow more efficient penetration of the RF fields into the toroid. A differential phase shift of 35 Deg/cm over a 3:1 bandwidth is predicted for the new phase shifter.

[Return to main document.](#)