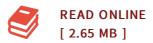




Artificial Transmission Line Structures for Tunable Microwave Components and Microwave Sensors

By Christian Damm

Shaker Verlag Jul 2011, 2011. Taschenbuch. Book Condition: Neu. 211x146x17 mm. Neuware - This work presents the welldirected design of artificial transmission line structures for compact tunable passive components and sensors with high sensitivity in the microwave region. Theoretic principles are derived and proof of concept realizations are designed, built and characterized in the frequency range of 1GHz to 10GHz. The shown approaches and solutions are of general type and can be applied to a wide frequency range of a few MHz up to the THz region. The main focus is the realization of tunable artificial transmission line structures in planar technology. To achieve the feature of tunability, varactor diodes as a classic discrete RF tuning element are used as well as the specific integration of varactors based on continuously tunable bulk media. For this purpose, highly anisotropic liquid crystal (LC) material and ferroelectric thick films made of Barium-Strontium-Titanate (BST) are introduced into the artificial material designs. 208 pp. Englisch.



Reviews

It is an awesome publication which i actually have ever read through. it had been writtern really properly and valuable. I found out this book from my i and dad recommended this pdf to discover.

-- Doyle Schmeler

This book is definitely not simple to begin on studying but quite fun to see. I actually have read and that i am sure that i will gonna read through yet again once again in the foreseeable future. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Brennan Koelpin