

1. Record Nr.	UNINA9910458912503321
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Titolo	Microwave network design using the scattering matrix // Janusz A. Dobrowolski
Pubbl/distr/stampa	Boston : , : Artech House, , ©2010 [Piscataway, New Jersey] : , : IEEE Xplore, , [2010]
ISBN	1-60807-130-8
Descrizione fisica	1 online resource (286 p.)
Collana	Artech House microwave library
Disciplina	621.3813
Soggetti	S-matrix theory Scattering (Physics) Microwave circuits Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Introduction -- 2. Theory of uniform waveguides -- 3. Theory of transmission lines -- 4. Wave variables and the scattering matrix -- 5. Signal analysis of multiport networks -- 6. Mode wave variables and mixed mode scattering matrix of differential networks -- 7. Noise wave variables and the scattering matrix -- 8. Noise analysis of multiport networks -- 9. Scattering functions in nonlinear modeling of microwave devices.
Sommario/riassunto	This authoritative resource provides you with comprehensive and detailed coverage of the wave approach to microwave network characterization, analysis, and design using scattering parameters. For the first time in any book, all aspects and approaches to wave variables and the scattering matrix are explored. The book compares and contrasts voltage waves, travelling waves, pseudo waves, and power waves, and explains the differences between real scattering parameters, pseudo scattering parameters, and power scattering parameters. You find important discussions on standard scattering matrices and wave quantities, mixed mode wave variables, and noise wave variables with noise wave correlation matrices. Moreover, the book presents clear methods for standard single ended multiport

network design and noise analysis. This in-depth reference is packed with over 1,100 equations and numerous illustrations.
