

1. Record Nr.	UNINA9910810674303321
Autore	Doumanis Efstratios
Titolo	Filter Design for Satellite Communications : Helical Resonator Technology
Pubbl/distr/stampa	Norwood : , : Artech House, , 2015 [Piscataway, New Jersey] : , : IEEE Xplore, , [2014]
ISBN	1-5231-1719-2 1-60807-756-X
Descrizione fisica	1 online resource (207 p.)
Collana	Artech House space applications library
Altri autori (Persone)	GoussetisGeorge KosmopoulosSavvas
Disciplina	621.3813224
Soggetti	Microwave filters - Design and construction Electric filters - Design and construction Electric resonators - Design and construction Artificial satellites in telecommunication - Equipment and supplies
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	Title; Contents; Acknowledgments; Chapter 1 Introduction; 1.1 Helical Resonator Filters; 1.2 Aim and Contents of This Book; Chapter 2 Microwave Filters for Satellite Systems: Requirements and Constraints; 2.1 Introduction; 2.2 System Perspective; 2.3 Satellite Filter Technology; Chapter 3 Filter Synthesis Techniques; 3.1 Introduction; 3.2 Synthesis of Prototype Response; 3.3 Bandpass Filters Synthesis Using a Ladder Network; 3.4 Coupling Matrix Techniques; Chapter 4 Analysis and Design of Helical Resonators; 4.1 Introduction; 4.2 Helical Resonator Considerations. 4.3 Full-Wave Modeling of Helical Resonators4.4 Quality Factor; 4.5 Dielectric Loading and Tuning; Chapter 5 Synthesis of Helical Resonator Filters; 5.1 Design of Helical Resonator Filters; 5.2 Input/Output Coupling; 5.3 Inter-resonator Coupling; 5.4 Design Examples; 5.5 Summary; Chapter 6 Quasi-Elliptic Helical Resonator Filters; 6.1 Introduction; 6.2 Cro.
Sommario/riassunto	This new book primarily addresses the needs of practicing RF and microwave engineers engaged with the design of distributed filters for

telecommunication and sensing applications, with particular emphasis on the space sector. This is a contemporary and comprehensive approach to the design of microwave filters with helical resonators. The very detailed step-by-step approach used throughout the book allows you to quickly familiarize with the basic concepts of microwave filter design and confidently engage with the design of helical resonator filters. In particular, several examples that present the design of filters for a wide frequency and applications range would provide a very useful tool at hand for the filter designer. Presenting you with cutting-edge design guidance, this is a complete reference for helical filter design.

---