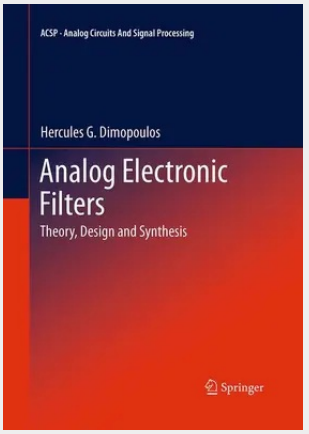
Dimopoulos

Analog Electronic Filters

Theory, Design and Synthesis



106,99 €
99,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9789401777728
Medium: Buch
ISBN: 978-94-017-7772-8
Verlag: Springer
Erscheinungstermin: 23.08.2016
Sprache(n): Englisch
Auflage: Softcover Nachdruck of the original 1. Auflage 2012
Serie: Analog Circuits and Signal Processing
Produktform: Kartoniert
Gewicht: 953 g
Seiten: 498
Format (B x H): 178 x 254 mm

Filters are essential subsystems in a huge variety of electronic systems. Filter applications
are innumerable; they are used for noise reduction, demodulation, signal detection, multiplexing, sampling, sound and speech processing, transmission line equalization and image processing, to name just a few. In practice, no electronic system can exist without filters. They can be found in everything from power supplies to mobile phones and hard disk drives and from loudspeakers and MP3 players to home cinema systems and broadband Internet connections.

This textbook introduces basic concepts and methods and the associated mathematical and computational tools employed in electronic filter theory, synthesis and design. This book can be used as an integral part of undergraduate courses on analog electronic filters.

- Includes numerous, solved examples, applied examples and exercises for each chapter.
- Includes detailed coverage of active and passive filters in an independent but correlated manner.
- Emphasizes real filter design from the outset.
- Uses a rigorous but simplified approach to theoretical concepts and reinforces understanding through real design examples.
- Presents necessary theoretical background and mathematical formulations for the design of passive and active filters in a natural manner that makes the use of standard tables and nomographs unnecessary and superfluous even in the most mystifiying case of elliptic filters.
- Uses a step-by-step presentation for all filter design procedures and demonstrates these in numerous example applications.

.

Filters are essential subsystems in a huge variety of electronic systems. Filter applicationsare innumerable; they are used for noise reduction, demodulation, signal detection, multiplexing, sampling, sound and speech processing, transmission line equalization and image processing, to name just a few. In practice, no electronic system can exist without filters. They can be found in everything from power supplies to mobile phones and hard disk drives and from loudspeakers and MP3 players to home cinema systems and broadband Internet connections.This textbook introduces basic concepts and methods and the associated mathematical and computational tools employed in electronic filter theory, synthesis and design. This book can be used as an integral part of undergraduate courses on analog electronic filters.Includes numerous, solved examples, applied examples and exercises for each chapter.Includes detailed coverage of active and passive filters in an independent but correlated manner.Emphasizes real filter design from the outset.Uses a rigorous but simplified approach to theoretical concepts and reinforces understanding through real design examples.Presents necessary theoretical background and mathematical formulations for the design of passive and active filters in a natural manner that makes the use of standard tables and nomographs unnecessary and superfluous even in the most mystifiying case of elliptic filters.Uses a step-by-step presentation for all filter design procedures and demonstrates these in numerous example applications. .

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)