Advanced Design Techniques for RF Power Amplifiers

Advanced Design Techniques for RF Power Amplifiers' main aim is to provide the reader with a deep analysis of theoretical aspects, modelling, and design strategies of RF high-efficiency power amplifiers. Advanced Design Techniques for RF Power Amplifiers begins with an analytical review of current state of the problem. Then it moves to the theoretical analysis of BJT class-F power amplifier near transition frequency and presents the necessary realization conditions. The next part concerns the practical verification and demonstration of the theoretical results. It is followed by the part devoted to the output networks of high-efficiency power amplifiers. The novel type of photonic band-gap structure providing improved characteristics both in the pass and stop bands is proposed. Finally, the fifth-harmonic peaking class F power amplifier design based on the above structure is presented.

Whether you are a researcher, or practising engineer, or even non-familiar with power amplifiers student, it is a good idea to look into Advanced Design Techniques for RF Power Amplifiers. Its main aim is to provide the reader with a deep analysis of theoretical aspects, modelling, and design strategies of RF high-efficiency power amplifiers. Advanced Design Techniques for RF Power Amplifiers begins with an analytical review of current state of the problem. Then it moves to the theoretical analysis of BJT class-F power amplifier near transition frequency and presents the necessary realization conditions. The next part concerns the practical verification and demonstration of the theoretical results. It is followed by the part devoted to the output networks of highefficiency power ampifiers. The novel type of photonic band-gap structure providing improved characteristics both in the pass and stop bands is proposed. Finally, the fifthharmonic peaking class F power amplifier design based on the above structure is presented. Advanced Design Techniques for RF Power Amplifiers can be used as a guide by scientists and engineers dealing with this subject and as a text book to graduate and postgraduate students. The latter will find the comprehensive nonlinear power amplifiers simulation tutorial in the Appendix. It provides an excellent quick start for beginners, although the main contents is intended for a skilled reader.



106,99 € 99,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

ArtikeInummer: 9781402046384

Medium: Buch

ISBN: 978-1-4020-4638-4

Verlag: Springer Nature Singapore **Erscheinungstermin:** 12.07.2006

Sprache(n): Englisch

Auflage: 2006. Auflage 2006 **Serie:** Analog Circuits and Signal

Processing

Produktform: Gebunden

Gewicht: 408 g Seiten: 116

Format (B x H): 160 x 241 mm



