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Lines; 5.9 Practical RF and Microwave Class-E Power Amplifiers and Applications; References; Chapter 6: Class E with Finite dc-Feed Inductance; 6.1 Class E with One Capacitor and One Inductor; 6.2 Generalized Class-E Load Network with Finite dc-Feed Inductance; 6.7 Load Network with Transmission Lines; 6.9 Power Gain; Chapter 7: Class E with Quarter-wave Transmission Line; 7.1 Load Network with Parallel Quarter-wave Line; 7.2 Optimum Load Network Parameters; 7.4 Matching Circuit with Lumped Elements; References
Chapter 8: Alternative and Mixed-Mode High-Efficiency Power Amplifiers8.2 Class-E/F Power Amplifiers; 8.4 Inverse Class-E Power Amplifiers; Chapter 9: Computer-Aided Design of Switched-Mode Power Amplifiers; 9.1 HB-PLUS Program for Half-Bridge and Full-Bridge Direct-Coupled Voltage-Switching Class-D and Class-DE Circuits; 9.4 HB-PLUS CAD Examples for Class D and Class DE; 9.5 HEPA-PLUS CAD Example for Class E; 9.7 ADS Circuit Simulator and Its Applicability to Switched-Mode Class E; Index

Sommario/riassunto

A majority of people now have a digital mobile device whether it be a cell phone, laptop, or blackberry. Now that we have the mobility we want it to be more versatile and dependable; RF power amplifiers accomplish just that. These amplifiers take a small input and make it stronger and larger creating a wider area of use with a more robust signal.Switching mode RF amplifiers have been theoretically possible for decades, but were largely impractical because they distort analog signals until they are unrecognizable. However, distortion is not an issue with digital signals-like those used