

1. Record Nr.	UNINA990001658980403321
Autore	Casanova, Paolo
Titolo	I principali volatili da caccia : anatomia, alimentazione, allevamento / Paolo Casanova
Pubbl/distr/stampa	Bologna : Edagricole, 1981
ISBN	88-206-2087-1
Descrizione fisica	VI, 293 p. ; 21 cm
Disciplina	636.5
Locazione	FAGBC
Collocazione	60 636.5 CASP 1981
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9910139765403321
Autore	Colantonio Paolo
Titolo	High efficiency RF and microwave solid state power amplifiers [[electronic resource] /] / Paolo Colantonio, Franco Giannini, Ernesto Limiti
Pubbl/distr/stampa	Chichester, UK, : J. Wiley, 2009
ISBN	1-282-23756-X 9786612237560 0-470-74654-8 0-470-74655-6
Descrizione fisica	1 online resource (520 p.)
Collana	Wiley series in microwave and optical engineering
Altri autori (Persone)	GianniniFranco <1944-> LimitiErnesto
Disciplina	621.381325
Soggetti	Power amplifiers Amplifiers, Radio frequency Microwave amplifiers Solid state electronics
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	<p>High Efficiency RF and Microwave Solid State Power Amplifiers; Contents; Preface; About the Authors; Acknowledgments; 1 Power Amplifier Fundamentals; 1.1 Introduction; 1.2 Definition of Power Amplifier Parameters; 1.3 Distortion Parameters; 1.3.1 Harmonic Distortion; 1.3.2 AM-AM/AM-PM; 1.3.3 Two-tone Intermodulation; 1.3.4 Intercept Point IP_n; 1.3.5 Carrier to Intermodulation Ratio; 1.3.6 Spurious Free Dynamic Range; 1.3.7 Adjacent Channel Power Ratio; 1.3.8 Noise and Co-Channel Power Ratio (NPR and CCPR); 1.3.9 Multi-tone Intermodulation Ratio; 1.3.10 Error Vector Magnitude</p> <p>1.4 Power Match Condition 1.5 Class of Operation; 1.6 Overview of Semiconductors for PAs; 1.7 Devices for PA; 1.7.1 Requirements for Power Devices; 1.7.2 BJT; 1.7.3 HBT; 1.7.4 FET; 1.7.5 MOSFET; 1.7.6 LD MOS; 1.7.7 MESFET; 1.7.8 HEMT; 1.7.9 General Remarks; 1.8 Appendix: Demonstration of Useful Relationships; 1.9 References; 2 Power Amplifier Design; 2.1 Introduction; 2.2 Design Flow; 2.3 Simplified Approaches; 2.4 The Tuned Load Amplifier; 2.5 Sample Design of a Tuned Load PA; 2.6 References; 3 Nonlinear Analysis for Power Amplifiers; 3.1 Introduction; 3.2 Linear vs. Nonlinear Circuits</p> <p>3.3 Time Domain Integration 3.3.1 Iterative Algorithm (Newton-Raphson and Fixed-point); 3.4 Example; 3.4.1 Forward Euler Solution; 3.4.2 Backward Euler Solution; 3.4.3 Steady-state Analysis and Shooting Method; 3.4.4 Example; 3.5 Solution by Series Expansion; 3.6 The Volterra Series; 3.6.1 Response to a Single-tone Excitation; 3.6.2 Response to a Two-tone Excitation; 3.6.3 The Probing Method; 3.6.4 Example; 3.6.5 Cascade of Systems; 3.7 The Fourier Series; 3.8 The Harmonic Balance; 3.8.1 Example; 3.8.2 Multi-tone HB Analysis; 3.9 Envelope Analysis; 3.10 Spectral Balance</p> <p>3.11 Large Signal Stability Issue 3.12 References; 4 Load Pull; 4.1 Introduction; 4.2 Passive Source/Load Pull Measurement Systems; 4.3 Active Source/Load Pull Measurement Systems; 4.3.1 Two-signal Path Technique; 4.3.2 Active Loop Technique; 4.4 Measurement Test-sets; 4.4.1 Scalar Systems; 4.4.2 VNA Based Systems; 4.4.3 Six-port Reflectometer Based Systems; 4.5 Advanced Load Pull Measurements; 4.5.1 Intermodulation Measurements; 4.5.2 Time-domain Waveform Load Pull; 4.5.3 Pulsed Load Pull; 4.6 Source/Load Pull Characterization; 4.7 Determination of Optimum Load Condition</p> <p>4.7.1 Example of Simplified Load Pull Contour 4.7.2 Design of an Amplifier Stage using Simplified Load Pull Contours; 4.8 Appendix: Construction of Simplified Load Pull Contours through Linear Simulations; 4.9 References; 5 High Efficiency PA Design Theory; 5.1 Introduction; 5.2 Power Balance in a PA; 5.3 Ideal Approaches; 5.3.1 Tuned Load; 5.3.2 Class F or Inverse Class F (Class F-1); 5.3.3 Class E or General Switched-mode; 5.4 High Frequency Harmonic Tuning Approaches; 5.4.1 Mathematical Statements; 5.5 High Frequency Third Harmonic Tuned (Class F); 5.6 High Frequency Second Harmonic Tuned</p> <p>5.7 High Frequency Second and Third Harmonic Tuned</p>
Sommario/riassunto	Do you want to know how to design high efficiency RF and microwave solid state power amplifiers? Read this book to learn the main concepts that are fundamental for optimum amplifier design. Practical design techniques are set out, stating the pros and cons for each method presented in this text. In addition to novel theoretical discussion and workable guidelines, you will find helpful running examples and case

studies that demonstrate the key issues involved in power amplifier (PA) design flow. Highlights include: Clarification of topics which are often misunderstood and misused,
