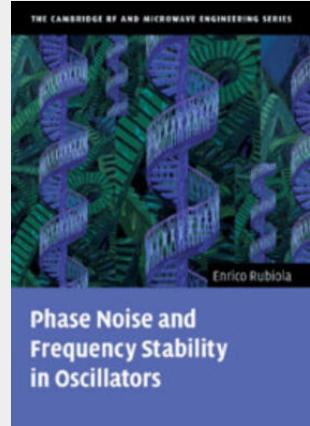


Phase Noise and Frequency Stability in Oscillators

Presenting a comprehensive account of oscillator phase noise and frequency stability, this practical text is both mathematically rigorous and accessible. An in-depth treatment of the noise mechanism is given, describing the oscillator as a physical system, and showing that simple general laws govern the stability of a large variety of oscillators differing in technology and frequency range. Inevitably, special attention is given to amplifiers, resonators, delay lines, feedback, and flicker (1/f) noise. The reverse engineering of oscillators based on phase-noise spectra is also covered, and end-of-chapter exercises are given. Uniquely, numerous practical examples are presented, including case studies taken from laboratory prototypes and commercial oscillators, which allow the oscillator internal design to be understood by analyzing its phase-noise spectrum. Based on tutorials given by the author at the Jet Propulsion Laboratory, international IEEE meetings, and in industry, this is a useful reference for academic researchers, industry practitioners, and graduate students in RF engineering and communications engineering.



74,80 €
69,91 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780521153287
Medium: Buch
ISBN: 978-0-521-15328-7
Verlag: Cambridge University Press
Erscheinungstermin: 01.04.2010
Sprache(n): Englisch
Auflage: Erscheinungsjahr 2010
Serie: The Cambridge RF and Microwave Engineering Series
Produktform: Kartoniert
Gewicht: 402 g
Seiten: 228
Format (B x H): 170 x 244 mm

